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ABSTRACT

This report discusses a project to develop, test, and disseminate the SNAP (Smart Needs Assessment Program) system for needs assessment and inservice training of regular educators to work with students with disabilities. The SNAP system is an expert system that defines the training needs of individual teachers and links these needs with training experiences. The system's three modules provide: (1) background information on professional roles, special education students, and general approaches for mainstreaming; (2) information on approaches to improving reading, mathematics, and general learning; (3) information on behavioral and emotional management. The system helps the teacher to define his or her training needs and interests and recommends appropriate training materials from the approximately 175 items included in the system. This report describes activities during the third year of the project and includes a paper by V. H. Pilato and others titled "SNAP System End of Second Year Evaluation." One-page summaries of 125 learning strategies in the expert system knowledge base are provided. These learning strategies focus on such topics as encouraging students to speak up, improving reading comprehension with semantic mapping, graphic organizers, and teaching time using the whole clock method. One-page summaries of 54 behavior strategies (such as contingency contracting, learning stations, and attending to student feelings) are also provided. Also included are text versions of the learning strategy selector knowledge base, the behavior strategy selector knowledge base, and the batch files. (17 references) (JDD)

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FINAL PROJECT REPORT

The SNAP System for Inservice Training of Regular Educators

GOO8730016

Project Director: David B. Malouf, Ph.D.
Assistant Director: Virginia H. Pilato, Ph.D.

1991

Institute for the Study of Exceptional Children and Youth
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FINAL PROJECT REPORT

The SNAP System for Inservice Training of Regular Educators

Project Director: David B. Malouf, Ph.D.
Assistant Director: Virginia H. Pilato, Ph.D.

This report discusses a project to develop, test and disseminate the SNAP (Smart Needs Assessment Program) System for needs assessment and inservice training. This project was supported by a Special Project grant (Project Number: GOO8730016) from the Division of Personnel Preparation, Office of Special Education and Rehabilitative Services, U.S. Department of Education. The report is divided into the following parts:

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Part 1: An Introduction to the SNAP System

Rationale for Developing the SNAP System

Although the "regular education initiative" is relatively recent (Will, 1986), its antecedents in the mainstreaming movement can be traced back more than twenty years (Dunn, 1968), and least restrictive educational placements have been mandated by federal law for over ten years. Thus, recent concerns about the readiness of regular educators to work with special education students (Jenkins, Pious & Jewell, 1990; Baker & Zigmond, 1990) do not reflect a new problem but instead a chronic problem that has persisted despite two decades of attention.

Early attempts to prepare regular educators to work with special education students took conventional forms such as structured courses, inservice workshops and training materials. Over time, newer approaches were introduced such as collaborative school-based teams, trainer-of-trainer models, and other "preferential" interventions (Phillips & McCullough, 1990; Fuchs, Fuchs & Bahr, 1990; Stainback, Stainback & Harris, 1989). These new approaches tend to create a decentralized and individualized process of training that is driven by teacher and student needs rather than by prescribed training curricula. Although responsive to individual needs, these approaches are susceptible to "information starvation" in which complex decisions about teacher training content and experiences must be made without a full definition of the problem and full consideration of the possible training options.

Computers are an information technology and therefore may play a role in facilitating the use of available information in making these decisions. This article will discuss one such approach, an expert system that was developed to provide a means for defining the training needs of individual teachers and linking these needs with training experiences. This system is termed the SNAP (Smart Needs Assessment Program) System.

Expert Systems

Expert systems are computer programs designed to apply bodies of knowledge to specific cases or problems to arrive at decisions or solutions. In a circumscribed and formal way, they emulate the problem solving processes of a human expert. At a minimum, expert systems have the following three components:

1. Knowledge Base. A "knowledge base" is a computer representation of some domain of knowledge. Most commonly, this representation is "rule-based" (i.e. in the form of if-then rules). However, expert systems may use other knowledge representation schemes. One such scheme is termed "frame-based". Frames represent chunks of the knowledge such as possible outcomes of the decision-making process.
2. Inference Mechanism. The "inference mechanism" is the process the computer uses to obtain solutions from the knowledge base. This is usually an iterative process in which the computer receives a problem or question, searches the knowledge base, asks questions derived from the knowledge base, searches some more, asks more questions, then finally arrives at a solution. The ability to actively deduce answers from a knowledge base is one of the key distinctions between expert systems and more familiar data base programs.
3. User Interface. The user interface is the bridge between the person seeking a solution or decision and the knowledge base and inference mechanism. User interfaces are usually textual, displaying questions and information in the form of written text.

Graphic interfaces (e.g. maps, diagrams, etc.) can also be used. Many user interfaces allow the person not only to input information and obtain answers, but also to follow the logic of the expert system as it solves the problem.

At one time expert system development required sophisticated programming in specialized languages such as LISP. However, authoring systems have become available which permit the development of expert systems using higher level programming or no programming at all. A number of such products are available for Macintosh and IBM-compatible microcomputers.

Expert Systems in Industry and Education

Outside the realm of education, expert systems have been developed for a variety of purposes. Feigenbaum, McCorduck and Nii (1988) identified hundreds of actual applications of expert systems in industry. Examples include a small expert system developed by Hitachi to control the automatic braking systems of trains, an expert system developed by Northrop Corporation to generate manufacturing plans for aircraft parts, and an expert system used by American Express to approve credit card transactions.

In special education, expert systems have a number of possible applications. For example, they can monitor compliance to legal mandates, apply rules for categorical classifications, and evaluate responses and give feedback to teachers as they learn to apply complex concepts (Hofmeister & Ferrara, 1986; Ferrara, Prater & Baer, 1987). The SNAP System exemplifies a type of application in which the expert system serves as a consultant or problem solving tool for the teacher.

What Is the SNAP System?

The SNAP System is an integrated system for needs assessment and teacher training to prepare regular educators to work with handicapped students. The SNAP System consists of (1) software which runs on IBM or compatible computers (640 K of RAM and a hard disk are required, 80286 or faster processor are recommended), and (2) an extensive collection of written training materials which have been gathered from a variety of sources.

The SNAP System is divided into the following modules:

1. The Background Knowledge Training Selector. This module provides background information on professional roles, special education students, and general approaches for mainstreaming. (For reasons discussed on page 7, this module is not included in this document.)
2. Learning Strategy Selector. This module provides information on approaches to improving reading, mathematics and general learning.
3. Behavior Strategy Selector. This module provides information on behavioral and emotional management.

The computer serves as a problem solving and information retrieval tool. Using "expert system" software techniques, it helps the teacher to define his/her training needs and interests, and it recommends appropriate training materials from the collection included in the system. This collection currently includes approximately 175 items collected from journals, textbooks, locally-developed materials and other sources. The collection can be expanded and updated on an ongoing basis, if procedures for quality control and system validation are followed.

The SNAP System is not intended to replace human trainers, but is instead intended to facilitate their work and increase the individualization, effectiveness and efficiency of training. It has been used successfully in a variety of contexts, including:

- Semester-long inservice teacher training courses;
- School-based assistance provided in conjunction with teacher assistance teams, vocational support service teams, and special education referral teams; and
- Call-in or walk-in assistance provided at a school district's staff development center.

The SNAP System has the combined advantages of a high-capacity information storage system, a library of selected professional materials, and an "intelligent" advisor which assists the teacher in solving problems and choosing appropriate training materials.

How Does the SNAP System Work?

The SNAP System is "problem driven"; it assumes that the teacher wants to solve a problem involving student learning or behavior. The computer presents a series of questions designed to define the problem and guide the selection of solutions. The computer then produces a list of suggested strategies based on the information it has obtained. The teacher can request brief on-screen descriptions of the strategies and can print the strategy list and the descriptions. One-page summaries of the strategies are provided in hard copy, and the summaries include references for the source training materials from which the strategies were obtained.

The SNAP System was developed using an expert system authoring tool called KES (Software Architecture & Engineering, Inc., 1988) which allows both rule-based and frame-based inference processes. The SNAP System knowledge base is a combination of rules and frames. The rules determine the values of important variables used in selecting specific training materials. For example, since some of the behavioral methods (such as response cost) are punitive, a set of rules are used to determine if punitive techniques are justified and to prevent their selection if not justified. The various training alternatives are represented by frames. Each frame includes a name and description of the training alternative and the factors which should govern its selection.

To a degree, the SNAP System is similar to a conventional computerized data base with training materials coded according to their appropriate uses. However, expert system software allows information to be processed in more complex and active ways than a database. The software, for example, can selectively ask questions to obtain information needed to identify training materials. Also, the software applies a minimal set covering algorithm to account for all of the teachers responses with the smallest set of solutions (Reggia, Nau, Wang & Peng, 1985).

SNAP System Development

The SNAP System is an extensive and complex product, even by expert system standards. It addresses an area of knowledge with relatively few absolute rules, and the solution space (i.e. the collection of training alternatives) is large and changeable. Thus, a long-term, cyclical development process emerged which included the following steps.

1. Development of System Components. Development activities ranged from adding new training alternatives to adding whole subsystems of rules or frames. These efforts often involved a collaboration between SNAP Project staff people and school system specialists.
2. Testing using Simulated Data. When new components reached an operational

stage, they were tested with data extracted from real cases or generated to test operational characteristics of the new component. The SNAP System could run cases automatically, and the number of simulated tests typically numbered into the hundreds.

3. Supervised Try-Outs. Teachers and specialists tried out the system under supervision and observation from a SNAP Project staff person. Think aloud and questioning procedures were used. Attention was focused on ease of operation, interpretations of items, and the quality of training recommendations made by the system. Revisions were made as needed.
4. Independent Try-Outs. The system was placed in the field for independent use by educators. These placements included school-based and centralized locations. Personnel from the SNAP Project or participating school systems supported the use of SNAP by delivering training and consultation to teachers and support staff, maintaining the collection of materials, etc. The SNAP System automatically recorded user evaluations at the end of each session, and follow-up interviews were administered to a random sample of users.
5. Analysis and Planning. Evaluation data, as described below, were analyzed. The next round of refinements and expansions were planned, and the process began again.

Evaluation of the SNAP System

Several methods have been used to evaluate the effectiveness of the SNAP System and to test the validity of its recommendations. Below are described three primary approaches— stages of concern, teacher evaluations, and validation studies.

Stages of concern. When the SNAP System has been used in the context of an inservice training course, an adapted version of the Stages of Concern Questionnaire (Hall, Wallace & Dossett, 1973) has been employed as a pre-post measure. This adaptation was made to allow individual profiles to be analyzed by computer. An algorithm compared subscale means with the overall test mean in relation to the variance within subscales and on the overall test. This process produced a list of outliers—subscale means which are significantly above or below the overall test mean (Coulson & Malouf, 1986).

The results have been consistent with the theory of teacher development underlying the Stages of Concern construct, and indicated positive change with regard to working with special students. Informational, personal and management concerns have tended to decrease while the more advanced levels of consequences, collaboration, and refocusing have tended to increase. For example, the table below displays the results of an analysis of forty-six regular education teachers who received an introductory training course using the SNAP System. These results are expressed in terms of the percent of teachers who decreased or increased on each of the stages, as measured by the aforementioned algorithm.

Increases and Decreases in Stages of Concern for Teachers Taking a Course Using the SNAP System

STAGE OF CONCERN	DECREASE	INCREASE
Information	28%	2%
Personal	33%	0%
Management	33%	0%
Consequence	7%	15%
Collaboration	2%	39%
Refocusing	7%	17%

Follow-up teacher interviews. SNAP Project staff people have periodically conducted follow-up phone interviews with teachers who have used the SNAP System. One set of end-of-year interviews involved 16 teachers who had used the SNAP System during the previous school year. Their responses can be summarized as follows. When asked if the process of answering questions helped them to focus on the problem, 14 of the 16 answered in the affirmative. All of the teachers had examined one or more of the recommended materials, and 13 of the teachers had put the techniques into practice or planned to do so. When asked if they planned to use the SNAP System again, all 16 answered in the affirmative (Pilato, Malouf & Fink, 1989).

Validation studies. Expert systems are sometimes evaluated by comparing them with human experts with regard to the processes and products of their consultations (Parry & Hofmeister, 1986). This type of study has been conducted periodically with the SNAP System. Most recently, a validation study was conducted on the Learning Strategy Selector. Cases involving various types of reading problems were presented independently to three reading specialists and to the SNAP System, and the resulting sets of recommendations for each case were then evaluated by a second group of reading experts. The SNAP System was found to produce recommendations of equivalent quality to those produced by the reading specialists (Pilato, Malouf, Peterson & Owings, 1991).

Conclusion

The SNAP System has demonstrated that expert systems can play a useful role in special education and teacher training. Expert system technology can be applied to complex instructional problems and can be used in real world situations where education and teacher training take place. It is likely that future advances in software and hardware technology will expand the potential value of expert systems and other information technologies. Continued efforts are needed and justified to realize the potential of these technologies in education.

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Part 2: Activities Completed During Project Year Three

The third and final year of the SNAP project (June 1, 1989 to May 31, 1990) focused on finalizing products, teacher training, summative evaluation, and dissemination. The following sections review major activities in each of these categories.

Finalizing SNAP Products

The SNAP System consisted of three computer programs--Background Knowledge Training Selector, Learning Strategy Selector, and Behavior Strategy Selector--and sets of printed training materials. At the conclusion of the second project year, all products were examined for their usefulness for teachers, and plans were made for final development and dissemination. Project staff decided to limit further development and dissemination of the Background Knowledge Training Selector. Reasons for this decision were: (1) This module required more support from a trainer than unstructured teacher-centered settings provided, (2) Evaluations of this module were consistently lower than the other two modules, and (3) It was judged that a new format, such as an intelligent tutorial or hypertext, would be more appropriate for this module, although neither was within the scope of the current project. Thus, the Background Knowledge Training Selector was excluded from further development during the third project year, and its use was limited to introductory special education courses in which it had already been implemented. This module is not included in this Final Report.

The second decision was that the Learning Strategy Selector was sound in its present form, so the only changes would be the addition of new training options, minor coding and interface revisions, and the addition of one-page training option summaries to the training materials. These summaries supplement but do not replace the full versions of the training materials.

The third decision was that the Behavior Strategy Selector would be revised, making it more diagnostic and more informative. Intensive testing and revision were required in two phases of software evaluation and development. The first phase consisted of in-house testing to establish technical soundness and face validity. This testing involved running literally hundreds of real and hypothetical cases, with software revision following unsatisfactory consultations. The second phase consisted of field testing in local school districts with regular and special education teachers, school administrators, and school psychologists. The software revision which followed field testing resulted in products which were both technically sound and true to actual conditions in schools. The table below presents teacher evaluations of the Behavior Strategy Selector before and after the revision, indicating improved satisfaction with the system.

When the SNAP System products had been finalized, each SNAP site in the participating school districts received updated versions of the software and materials. Additional training was provided to the site-based SNAP leadership as needed.

Teacher Evaluations of the Behavior Strategy Selector Before and After Revision

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Before Revision (24 cases)					
Session was worthwhile	42%	46%	8%	4%	
Materials seem appropriate	21%	58%	21%		
Information will be examined	42%	42%	13%	4%	
After Revision (59 cases)					
Session was worthwhile	51%	42%	7%		
Materials seem appropriate	47%	39%	12%	2%	
Information will be examined	59%	37%	3%		

Teacher Training

A major focus of the third year was teacher training. As in previous project years, we continued to make SNAP available in two models: (1) structured training courses offered by a school district to prepare teachers for teaching special education students, and (2) unstructured, teacher-centered settings. In the latter model, we provided SNAP as a teacher-support station at a staff development center and in "SNAP Rooms" in elementary and secondary schools. In both cases, trained SNAP facilitators were available to help teachers use the system.

To make SNAP a viable problem solving technology in unstructured settings, we delivered introductory and advanced training throughout the year. Introductory training was given to many groups, including: Beginning teachers, teacher trainers, schools beginning their SNAP implementation, special education teachers, experienced teachers in a summer workshop for professional enrichment, Teacher Assistance Teams, school administrators, and school psychologists. We provided advanced training to site-based SNAP facilitators and school personnel engaged in a multi-phase implementation process.

As a result of these efforts, we recorded 108 separate SNAP System consultations during the course of the year.

Successful implementation of SNAP in local school systems became a major issue in the final year. Clearly, our staff had produced a strong new tool for teacher training, but we had much to learn about the infusion of our technology into teachers' professional lives. A report of our experiences, one of our third year activities, has been accepted for publication by Educational Technology (see Part 3). This report asserts that full investment in technology implementation is necessary to actually link new technology, such as expert systems, to teacher use.

Summative Evaluation

Several methods have been used to evaluate the effectiveness of the SNAP System and to test the validity of its recommendations. During the third year of the project, efforts focused on teacher evaluations and a validation study, as described below. Also, a report was completed during the third

year on the evaluation activities conducted during the previous year. This report presents some of our most extensive evaluation activities on SNAP System implementation, and it is included in Part 3.

Teacher evaluations. At the end of each session with the SNAP System, the computer presented three evaluation statements with a 5-point response scale ranging from strongly disagree to strongly agree. The statements were (1) "This session with the SNAP program seems to have been worthwhile"; (2) "Based on the information I've seen so far, the suggested materials seem to be appropriate for my needs"; and (3) "I will look at the written materials suggested by the computer". The table below presents the results of these questions for the third project year.

Teacher Evaluations of SNAP System for the Third Project Year

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Learning Strategy Selector (49 sessions)					
Session was worthwhile	35%	45%	16%	2%	2%
Materials seem appropriate	31%	41%	20%	6%	2%
Information will be examined	45%	39%	12%	2%	2%
Behavior Strategy Selector (59 sessions)					
Session was worthwhile	51%	42%	7%	0%	0%
Materials seem appropriate	47%	39%	12%	2%	0%
Information will be examined	59%	37%	3%	0%	0%

Validation study. Since the goal of SNAP is to emulate the logic and decision making capabilities of human experts, a study was conducted to evaluate the quality of SNAP's recommendations relative to those of human experts. This two-tiered validation study focused on a specific portion of the Learning Strategy Selector. Cases involving various types of reading problems were presented independently to three reading specialists and to the SNAP System, and the resulting sets of recommendations for each case were then evaluated by a second group of reading experts. The SNAP System was found to produce recommendations of equivalent quality to those produced by expert reading specialists. A complete description of the methodology and findings of this validation study appear in a paper cited in Part 3.

Dissemination

In the third year, we conducted local, state and national dissemination. Through presentations in Maryland, we increased awareness of the SNAP System's potential for solving instructional and behavioral problems. We introduced the system in large and small group demonstrations and through meetings with regular and special educators in six school districts in the state of Maryland. In Howard County and Prince George's Counties, our two primary field test sites, we offered training to new teacher groups, including beginning teachers (one to three years experience) and student teachers assigned to teacher education centers. We also made a presentation at the 1990 Maryland Instructional Computer Coordinators Association Annual Meeting.

A final activity was to prepare articles for submission to professional journals for national

dissemination. Two such articles are cited in Part 3.

As the funding period ended, we finalized all arrangements necessary for established sites to use SNAP independently. Two important contributions were our production and dissemination of a SNAP user's manual and the negotiation of site licenses with Software A&E. Also, we established a linkage with the University of Maryland Office of Laboratory Experiences to promote University support of SNAP System use by student teachers.

Part 3: Recent Papers on the SNAP System

Papers Intended for Publication Elsewhere

The following papers are intended for publication in widely-available periodicals. Therefore, they are not included in this report. For information on obtaining these papers, contact the Institute for the Study of Exceptional Children and Youth, Department of Special Education, University of Maryland, College Park, MD 20742.

Pilato, V.H. & Malouf, D.B. (in press). Expert systems in schools: Solving the implementation paradox. Educational Technology.

Pilato, V.H., Malouf, D.B., Peterson, D.L., & Owings, M. (1991). Validation of an expert system for instructional decision-making. Manuscript in preparation. Institute for the Study of Exceptional Children and Youth, University of Maryland.

Paper Included in this Report

The following paper is included on the pages which follow.

Pilato, V.H., Malouf, D.B., & Fink, C.M. (1989). SNAP System End of Second Year Evaluation. Unpublished technical paper. Institute for the Study of Exceptional Children and Youth, University of Maryland.

SNAP System
End of Second Year Evaluation

Virginia H. Pilato
David B. Malouf
Carolyn M. Fink

June 1989

Special Project: Microcomputer-Assisted Needs
Assessment System for Teacher Training in
Special Education

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SNAP System

END OF THE YEAR EVALUATION
June 30, 1989

The SNAP System has been developed by David Malouf, Virginia Pilato, and Carolyn Fink at the University of Maryland as a tool for helping schools mainstream disabled students. The system helps classroom teachers clarify student-related problems and provides information and materials intended to help them teach their mainstream classes more effectively.

The primary purpose of the second year of the SNAP grant was to explore a variety of implementation models. Experience had sufficiently demonstrated the usefulness of the system in graduate courses taught by Virginia Pilato, Assistant Director of the SNAP project. For this reason expansion of delivery models was sought in the second year. This report will identify each model where the SNAP System was tested this year.

The secondary purpose pursued in the second year was to assist local school systems in their implementation of the SNAP System. Second year activities were concentrated in Howard County; however, before the end of the year, a Prince George's County school had learned of the project and asked to be included

as a test site. This report will describe activities in these two school districts and explain the SNAP project efforts to assist with implementation.

Description of SNAP Sites

In the spring semester of 1989 the SNAP System was made available to Howard County teachers in the following ways:

(a) As a problem solving approach available to all teachers (and other educators) in Howard County and located at the Howard County Staff Development Center. Educators in the areas of classroom teaching of all grade levels, staff development, school psychology, and supervision used the system here. At this site two full time "SNAP Facilitators" were available to assist teachers.

(b) As an "assignment" in a state approved one semester workshop described as "Introduction to Special Education", taught by Chuck Meyer, a Howard County supervisor of Special Education. Teachers in this course were required to use the SNAP System at the Staff Development Center, which is located near the school where the course is taught.

(c) As a problem solving tool for teachers of trades areas at the Howard County School of Technology. At this site teachers had the assistance of the Vocational Support Services Team.

(d) As a screening tool for an ARD committee at a Howard County elementary school. At this school teachers and ARD committee members worked together to improve their knowledge of

student-related problems and to learn additional ways to teach classes where students were having problems.

(e) As a problem solving tool for teachers in two additional elementary schools in Howard County. In one of these schools, the Assistant Principal, a former special education teacher, requested having the system available for her teachers. In the other school the SNAP project requested the involvement of the school because of the availability of its Teacher Assistance Team for support of teachers using the system. These two sites are seen as two delivery models; however, their involvement with the project came too late in the school year for them to be viewed separately at this time.

A Prince George's County elementary school is joining the Howard County sites as the second year of the project ends. This model for SNAP System implementation is presently being viewed as different from those in Howard County primarily because it is in a separate LEA. It is anticipated, however, that this school will share similarities with the Howard County elementary school which also came to the SNAP project asking to have a system available in its building. Administrative support is known to be a critical factor in the implementation of innovations such as the SNAP System, and in these two schools SNAP has been requested by administrators who were formerly special education teachers.

Implementation Activities

Implementation activities of the second year of the grant

fall roughly into three categories: (1) training, (2) user support, and (3) formative evaluation. These major phases of SNAP System implementation occurred simultaneously and are discussed in this section.

Training. Initial training efforts focused on providing the selected Howard County SNAP facilitators with indepth training. This preparation of the SNAP facilitators, in fact, became the cornerstone of the University of Maryland-Howard County collaboration on the SNAP project in the second year of the grant. The facilitators -- Beverly Koren, previously a special education teacher, and Jody Herman, previously a regular education teacher -- became the LEA representatives of the SNAP System. Based at the Staff Development Center, they led the county wide "marketing" activities, tied the SNAP System to Staff Development Center priorities, assisted teachers in using the system, assisted the project director and assistant director in site training, and assisted with formative evaluation efforts.

Other training focused on preparing Howard County and Prince George's County administrators, teachers, and support personnel to use the SNAP System in their schools. The general approach at each school was to train administrators and teacher leaders first, work with them to develop plans for additional training for their staffs, and then provide supplemental training and support as required.

The supplemental training and support methods varied from site to site according to the implementation plans worked out by

each school. In Howard County, Stevens Forest Elementary School asked to have SNAP System representatives available in the school for a full day to train teachers how to use SNAP during their planning time. Whiskey Bottom Road Elementary School, choosing to use the system as an ARD screening tool, asked to have just the ARD committee members trained since they would be the primary users. The Howard County School of Technology asked the project director, David Malouf, and assistant director, Virginia Pilato, to conduct an inservice meeting with the whole faculty and then to assist with team level orientation meetings led by members of the Vocational Support Services Team. Running Brook Elementary School, following the School of Technology model, requested a school wide inservice meeting and is planning team orientations for indepth training in the fall of 1989. In Prince George's County, this model of whole school awareness training followed by team orientations is planned for the fall of 1989.

User Support. Project members provided user support in a variety of ways. One way was to assist teachers and other educators during their actual SNAP consultations with the computer. This form of support was one of the major tasks of the SNAP facilitators at the Howard County Staff Development Center. They assisted SNAP users in person and over the telephone.

Another form of user support was the consultant role of SNAP project personnel when participating sites planned their implementation activities. Since an objective of Year 2 activities on this grant was to help school systems fit the SNAP

System to their own needs, the consultant role was seen as the most facilitative. In this capacity the project director and assistant director helped sites work out individual plans for meshing SNAP, a problem solving tool, with the routines of their schools.

Midway into the spring semester -- pursuing a third method of user support -- the SNAP project took steps to enhance user commitment and promote long range planning by conducting a half day, all-site workshop at the Howard County Staff Development Center. The workshop, described as Advanced Leadership Training, brought together school leadership teams, which consisted of an administrator and selected teachers and specialists. With time away from the demands of their own buildings, these teams were given additional SNAP System training, time to develop action plans for further implementation at their schools, and opportunities to learn from the experiences of the other SNAP sites. Individualized user support models were developed in meetings of sites and SNAP project personnel. Evaluation of this activity is provided in Appendix A.

Formative Evaluation: The SNAP System, previously demonstrated as successful in the traditional one semester graduate course format, had not been tested in other delivery models prior to this year. For this reason formative evaluation procedures were held to be critically important for further development and expanded implementation. Five forms of evaluation conducted between January and June 1989 are reported

here with implications for improvements to the system.

(1) Evaluation of software and printed materials with immediate revision procedures. From reactions of users, the project became aware of the need to make two general types of changes -- user interface changes (e.g., minor improvements in clarity and revisions to make language more appropriate) and limited expansion of topics (e.g., information on elective mutism and on problems associated with head trauma). Additionally, the project became aware that in the current shift from a special education course to a problem solving tool in school systems, SNAP printed materials needed work to enhance their readability for their new audience.

Since process evaluation activities were an ongoing aspect of Year 2 work, the two general types of changes cited above were made throughout the year. Summaries were prepared to accompany all of the Behavior Strategy Selector training options, and plans were made to follow the same procedure for the Learning Strategy Selector. Support visits to all sites prepared users for all the notable changes they would encounter in their revised software and other materials.

(2) Participant evaluation of the Advanced Leadership Training workshop. This half day workshop, described above as a method of providing user support, was attended by 16 supervisors, administrators, teachers, and specialists. Appendix A reports participants' responses to a workshop evaluation instrument provided by the Staff Development Center. These evaluation data

served to promote further user support efforts.

(3) Site visits. Qualitative research and evaluation methods of participant observation and interviewing were used to study sites where the SNAP System is being implemented. Field notes were recorded and analyzed to improve project understanding of the schools where the system failed to mesh easily with established routines. This method of formative evaluation led directly to the need of the project to hold Advanced Leadership Training in mid-March for all SNAP sites. This method also contributed to the carefully individualized planning of building level support activities. Additionally, qualitative methods that were employed to enhance the productivity of site visits are leading to a forthcoming study of the relationships among implementation practices, features of computer products, and characteristics of schools. Findings of this study will be the basis of a manual to be distributed to new SNAP System sites.

(4) Analysis of user response data. Three forms of user response data were collected and analyzed: evaluation questions at the end of each computer session, telephone interviews with a sample of teachers who used SNAP, and interviews with key personnel at each site. Appendix B is a set of documents which reports user response data and provides formative evaluation information to be considered in project planning for Year 3.

Additionally, the user response data revealed that the Background Knowledge Selector was not used with the frequency of the Behavior and Learning Strategy Selectors, supporting the

observation that this SNAP component might still require major revision for these LEA-based delivery models. To increase use and promote users' satisfaction with the Background Knowledge Selector, this component is currently being re-written in Hyperties to allow non-linear databased searches for information about special education.

(5) "Summer Kick-Off Meeting" with representatives of participating school systems. The primary purpose of this meeting, held at the University of Maryland one week following the end of the school year, was to plan collaboratively for the work to be accomplished during the summer to improve the SNAP System. Feedback from participants in the areas of SNAP computer programs and written materials, university support, and delivery models in schools is now helping the project to make improvements in these areas. Appendix C reports the outcome of this meeting.

Implications

From the formative evaluation procedures, several implications for Year 3 of the grant can be drawn. Continued support will be provided to present sites, with modifications of support methods to be informed by Year 2 recommendations. Expansion to an additional secondary school will be planned, with the high school of the project math consultant, Pam Mason, tentatively selected. Recommendations from LEA representatives to the June "Summer Kick-Off Meeting" will be pursued with primary attention given to improving SNAP System computer

programs and written materials. Finally, a qualitative study of SNAP System implementation activities will be conducted so that a manual can be prepared which will facilitate successful integration of this system with established school routines.

The following pages contain the Appendices for the "SNAP System End of Second Year Evaluation".

Appendix A	page 24
Appendix B	page 25
Appendix C	page 41 (omitted from report)

ADVANCED SNAP LEADERSHIP TRAINING - March 14, 1989
PARTICIPANT EVALUATION

Part I:

<u>Item</u>	(scale: 5-0, with 5 high)	<u>ave. score</u>
The content of the workshop was worthwhile.		4.58
The workshop leaders were well prepared.		4.75
The information was effectively presented.		4.83
The facilities and materials were appropriate and conducive to a good workshop.		4.83
The workshop helped me add to my professional or personal skills.		4.42
I plan to implement the techniques, skills, and/or information presented.		4.58

Part II:

What part(s) of the workshop did you consider most helpful?

Time set aside from regular duties to discuss SNAP and plan for future
Using the computer independently
Discussion with others implementing this program
Small group working session to address individual school problems
Actually going through the programs on the computer and sharing problems/successes with one another
It was very helpful as far as making me aware of the program.
Use of SNAP program
Time to talk about our plans, concerns, frustrations, etc.
Group activities
Planning by individual schools to meet their particular needs

What do you wish could have been changed?

The notes (?) being shorter and usable without reading this much

What follow-up do you feel that you need?

Building level meeting to talk with staff
Periodic contact from Univ of Md
Implement some of the goals and discuss it
Stated in Action Plan
We need to talk on a schoolwide basis now.
More time to plan this process.
Accessibility to facilitator

Additional comments:

Thank you for your level of involvement.
We need to be sure to approach this implementation realistically. So far, the flexibility has been great! Thank you!

SNAP System
End of Year Evaluation

June 1989

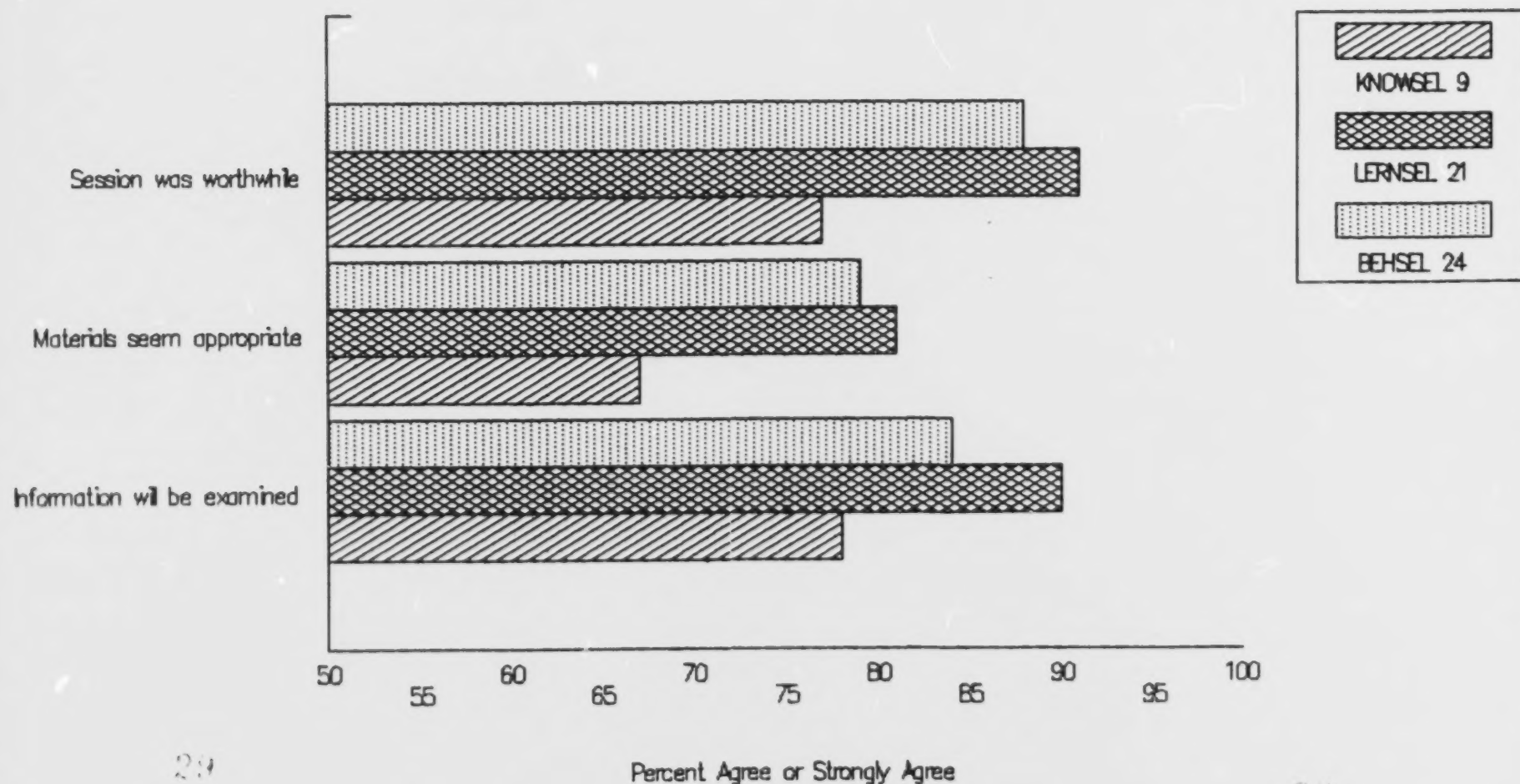
Institute for the Study of Exceptional Children and Youth
Department of Special Education
University of Maryland
College Park, MD 20742

(301) 454-6921

Attached are reports of evaluation data on the use of the SNAP System in Howard County during the 1988-89 academic year. These reports include:

- A. A bar graph of responses to the following three evaluation questions that were asked at the end of each computer session.
 - 1. This session with the SNAP program seems to have been worthwhile.
 - 2. Based on the information I've seen so far, the suggested materials seem to be appropriate for my needs.
 - 3. I will look at the written materials suggested by the computer.
- B. A summary of the results of telephone interviews of 16 teachers who had used the SNAP System.
- C. A summary of the results of 5 interviews of on-site personnel who assisted with the implementation of the SNAP System.

People Agreeing or Strongly Agreeing with Evaluation Statements



SNAP (SMART NEEDS ASSESSMENT PROGRAM)

Institute for the Study of Exceptional Children and Youth
Department of Special Education
University of Maryland
College Park, Maryland 20742

Spring 1989 - Teacher Interviews

(All but two teachers were interviewed by the SNAP staff.
Teachers #10 and #13 wrote their responses on the interview
protocol.)

1. How did you feel about your consultation with the
computer?

elementary:

#22 - Worked fine.

#18 - Liked it; real useful.

#7 - Particularly good for a new teacher; I've already gone
through a lot of this kind of information. (She has taught for
5 years.)

#24 - Enjoyed it thoroughly.

#2 - Good.

#5 - (Bev used the computer for this teacher following a
consultation at the teacher's school.)

#20 - Good; interesting; lots of ideas to use in various
situations, not just the one I came with.

#13 - Good

#10 - It was very helpful.

secondary:

#13 - 7th grade science - got some useful information, but
wanted more.

#16 - 7th grade reading - Worked well, interesting approach,

appealing.

#15 - H.S. industrial arts - Adequate

vocational-technical center:

#36 Interesting. Had a lot of good ideas.

#43 Fine. Average.

#47 I liked it. It's been a while since I did it. Pleased.

other:

#8 - County Diagnostic Center - fine, great, very helpful.

2. Did you feel that the questions you answered helped you focus on a problem?

elementary:

#22 - Yes; it is always hard because each problem is going to be real individual, but the program helped.

#18 - So familiar with the questions, from using SNAP to help other teachers, that I didn't really read them.

#7 - Yes.

#24 - Yes.

#2 - OK

#5 -

#20 - Yes.

#13 - Yes.

#10 - Yes.

secondary:

#13 - only one was helpful - behavior

#16 - Yes, focused, helped to zero in.

#15 - Solved what I brought to it.

vocational-technical center:

#36 Yes. The questions did narrow it down. You could broaden or narrow the focus.

#43 Yes. [There was hesitation in this answer and seeming reservation.]

#47 Yes. Yes I do.

other:

#8 - Yes.

3. Did you feel that you had sufficient guidance in selecting the training activities from the SNAP boxes/binders?

elementary:

#22 - Definitely!

#18 - Yes

#7 - Yes

#24 - Yes.

#2 - Yes.

#5 -

#20 - Yes.

#13 - Yes.

#10 - Yes.

secondary:

#13 - Yes

#16 - Very! Lots of help from Bev/Jody, but having the system in the school is preferable.

#15 - Yes, no difficulty.

vocational-technical center:

#36 Yes.

#43 Yes. The VSST person was there to help.

#47 Yes. No problems.

other:

#8 - Yes.

4. About how many training activities did you take from SNAP boxes/binders? (Interviewer will mark consultation printout.)

elementary:

#22 - Everything.

#18 - Made about 6 copies of shorter training options; the longer ones were too intimidating to copy.

#7 - Used one; too familiar with the others.

#24 - 10

#2 - The full Behsel set.

#5 - 5

#20 - 7 out of 15.

#13 - 1

#10 - 7

secondary:

#13 - 3-4

#16 - All

#15 - 4

vocational-technical center:

#36 Four. Selected because they dealt with student motivation. [Ten different options were recommended.]

#43 Just one. [Only one option was recommended.]

#47 About 3 of them. [Six were recommended.]

other:

#8 - 10-15

5. Which training materials did you actually use?

elementary:

#22 - Kept 3. The one on group contingencies seemed the most useful. This child doesn't focus on how he is perceived by the world.

#18 - Looked at all I copied.

#7 - One

#24 - will use in the summer.

#2 - All behsel training options for her TAT files.

#5 - Read all, used 4.

#20 - All; read them the night I got them and returned them.

#13 - Can't remember.

#10 - Behavior Modification

secondary:

#13 - one, contingency contracting.

#16 - Lots of duplication, overlap of information, whittled down to 2-3.

#15 - Read and returned to SDC

vocational-technical center:

#36 Just one--the one on Self-Management [B21].

#43 One. [Just one was recommended. The teacher did not seem to be aware of the title or number. The VSST person had helped with selection.]

#47 [The teacher responded by describing methods used, which may not have corresponded one-to-one with training options.]

1. Explaining the purpose of assignments. I have been guilty of not doing this in the past. 2. Allowing students to select work themselves. Giving them the option of picking a task or operation to work on. [The teacher paused for a while but couldn't remember other examples. He commented on the length of time since the session.]

other:

#8 - Level IV EH Teacher, Token Economy and Modifying materials for Sp Ed teacher - terrific, enabled me to make presentation and feel comfortable enough to do mini-workshops based on materials.

6. How did you use them?

elementary:

#22 - Did not implement any training options, got them in May - too late to use. Used them only for Chuck's assignment and for future reference.

#18 - Read them, thought about them, integrated the ideas into approaches I already use.

#7 - Extended the training option by calling Sp Ed at the Bd of Ed to find outside help. The Bd recommended talking to a teacher who had a similar problem (elective mutism).

#24 - Shared with Assistant Principal and Speech Therapist about how it would be a good tool to use at ARDs next year. Will get feedback from Sp Therapist.

#2 - Made them available in school in TAT files; the problem the training options were intended for was "solved" before SNAP was consulted.

#5 - Used with boys individually, made up the materials, made plans for aide to use, and made adaptations as needed.

#20 - Webbed some ideas, talked about them at TAT meeting, made some adaptations.

#13 - Consulting only; talked to colleagues and sought their help; adapted somewhat.

#10 - In a paper for a course; talked to colleagues; did not seek their assistance; wrote lesson plans/notes; adapted and followed training options as described.

secondary:

#13 - Will use.

#16 - Student was in process with our interdisciplinary team. Training options were taken to the team, and an approach was developed. They fit in these recommendations with other techniques.

#15 - Read.

vocational-technical center:

#36 I had one student who I had to stand next to constantly. I used the method [Self-management] to teach him to work more independently and not worry about what all the other students were doing. I didn't seek assistance, just "grabbed and went with it." I followed the instructions pretty closely, although some of the information didn't apply, seemed to be for younger students. I have also talked with other teachers in my area about doing a survey of rewards. The material seems geared to younger students, but it shouldn't be hard to adapt it for older kids.

#43 I had a student with a bad self-image. She always looked down when you talked to her. I gave her a hug when she looked at me. She likes hugs. [The option was B26- Let students choose reward.] I talked it over with the VSST person [Greg], who assisted with selection. Made no adaptations, but did it exactly as it said.

#47 Made some modifications.

other:

#8 - gave materials to other teachers and used myself; made adaptations and followed specific directions both

7. What did you think of your classroom use of SNAP training activities ?

elementary:

#22 - Did not implement.

#18 - The one on word attack was right on the mark. Overall, they were helpful.

#7 - OK; help from other teacher was useful.

#24 - Haven't used it yet.

#2 - Keeping behsel training options with school's TAT materials; wants them available when the problem next occurs.

#5 - Exactly what was needed.

#20 - Great, really good ideas.

#13 - (no answer)

#10 - Very good.

secondary:

#13 - (no answer)

#16 - Didn't work very well, but the student subsequently moved. Their approach just didn't work. A very difficult case.

#15 - Not really appropriate for industrial arts

vocational-technical center:

#36 Was pretty good actually. Some of the ideas were more appropriate for younger students, but it wasn't hard to adapt for older kids.

#43 Fine. Top rating. Was effective.

#47 Yes, it was effective. The computer is sort of a gimmick. You could probably accomplish the same thing with a book and an index. It was a good filing system for the written materials. The materials were the most beneficial part. Whoever did them did a good job.

other:

#8 - (no answer)

8. Will you use any of these training activities again?

elementary:

#22 - It is really hard to say. Personally, I'd be more inclined to talk with colleagues that to go to the SDC to use SNAP.

#18 - Yes, all.

#7 - Yes.

#24 - Yes, after reading, will decide.

#2 - Yes; these materials are what school sees as helping with time on task problems.

#5 - Absolutely, will use all.

#20 - Yes.

#13 - No.

#10 - Will use again, selecting from these based on my needs.

secondary:

#13 - Yes.

#16 - Absolutely!

#15 - Yes, behavior; really don't have any behavior problems.

vocational-technical center:

#36 Definitely

#43 The problem was sort of unusual, but if I encountered it again I would use the approach again.

#47 Yes.

other:

#8 - yes

9. Do you plan to use the SNAP System again?

elementary:

#22 - Definitely.

#18 - At SDC.

#7 - Yes.

#24 - Yes, plan to use it continuously.

#2 - Yes, if reminded SNAP exists.

#5 - Yes.

#20 - Yes, would like to see it at Dasher Green.

#13 - Yes, if time permits.

#10 - Yes.

secondary:

#13 - Yes.

#16 - Depends on seriousness of problem and presence of other resources in the school. SNAP will be last resort, because it is not in the school. If it were in the school, it would be the first choice. It does all the work for you.

#15 - If it has options I need including safety.

vocational-technical center:

#36 Yes

#43 Yes

#47 Yes

other:

#8 - definitely, liked the immediacy of the system.

10. How would you like to see the SNAP System changed?

elementary:

#22 - Very important to have SNAP in the school. Right now not very many people know about it, so more information about SNAP would help. Yes, if SNAP can be used over the phone, I think people will use it.

#18 - The one-sheet summaries sound helpful. The main problem is that SNAP is so time-consuming.

#7 - (not asked; teacher ran out of time.)

#24 - Summarize the training options. Use other options than

behavior modification.

#2 - (no answer; ran out of time to ask)

#5 - (no answer)

#20 - None, but another use: Have a printout to show parents at conference.

#13 - Nothing.

#10 - Include information for bibliographies.

secondary:

#13 - Behavior strategy changes. Need something other than modification.

#16 - "Not of the top of my head. It couldn't have been easier." At suggestion of consultation over the phone: She thought this is a great idea.

#15 - More training options for use with Non-English speaking students working in industrial arts (safety concerns).

vocational-technical center:

#36 Few more things for older students. I have some kids (mostly special ed) that are 19 or 20 years old. The SNAP System worked well. Whoever did it put in a lot of work.

#43 Gear more to older kids. This particular student was immature so the training material was appropriate for her.

#47 I'm trying to think what I didn't like about it. I didn't mind using the computer, but the information wasn't as legible as the printed materials. [The teacher was apparently referring to the short descriptions as printed out by the computer. When asked if he meant that the computer should just print titles and numbers he said yes, and said that maybe it was just the printer at that school that was a problem.]

other:

#8 - Great! Expand it. Answered my questions at this time.

SNAP (SMART NEEDS ASSESSMENT PROGRAM)

Institute for the Study of Exceptional Children and Youth
Department of Special Education
University of Maryland
College Park, Maryland 20742

Spring 1989 - SITE INTERVIEWS

Interview Sites: Staff Development Center, Facilitator Beverly Koren; Whiskey Bottom Elementary School, ARD Committee; Vocational-Technical Center, VSST Team; Special Education Course, Instructor Chuck Meyer

1. Are you satisfied/not satisfied with the University of Maryland support that has been available to you?

Respondents reported being "very satisfied" with UM support. Comments showed that they liked the collaborative style, which in some cases provided a sense of dual ownership. In comparison to other university projects and to other computer products, respondents gave UM high marks, with UM providing the only follow up support one site received for computer products this year.

2. What changes -- if any -- would you like to see in the University of Maryland support next year?

Several suggestions:

- Involve more of the Special Education teachers and supervisory staff.
- Repeat the Stevens Forest type of inservice where SNAP and SNAP facilitators are available all day in a highly visible location with food.
- Make it less time consuming.
- Work on "marketing" SNAP, the system and some of the techniques it recommends.

3. Are you satisfied/not satisfied with the SNAP System?

- Generally, yes. See #4.

- Will like it better when summaries are added.
- One site dropped out for next year.

4. What changes -- if any -- would you like to see in the SNAP System next year?

- Continue to focus on the priorities of Howard County. Add new Howard County information so that SNAP is another dissemination source.
- Provide more materials for teaching older students.
- Broaden the Behavior Strategy Selector to achieve a better balance with the behavior modification recommendations and to focus more on social skills. Help teachers focus on shy/withdrawn students. Also, broaden the Learning Strategy Selector so that teachers can have the goal of wanting to increase students' motivation.
- Decrease amount of time involved.
- See that SNAP is installed in locations that are highly visible in schools. Enhance the setting with informative bulletin boards. Work on marketing.
- Make the recommendations more quick and dirty. Summaries will help. Some materials are too long and too "theoretical".

5. Over all, have your teachers had a positive or negative experience with SNAP?

Answers to this question ranged from very positive to indifferent, with "positive" the prevalent response. The "indifferent" remark came from a site which had very little SNAP use. A point was made that some teachers are still uncomfortable with computers, while others are serious enthusiasts, and this attitude effects their attitude toward SNAP.

6. At the Fall 1989 SNAP Workshop for all sites, what issues related to SNAP use would you like to see addressed?

- More on the history of SNAP in Howard County and what was done to the system in the summer.
- Success stories on how to motivate staff.
- Address the uniqueness of some of the sites to help

sites "market" SNAP.

7. At the Fall 1989 Workshop, what experiences would you like participants to have?

- Food and real coffee!
- Experience that will help participants develop a sense of ownership of SNAP.
- Hands-on experiences with the computer.
- Include administrators and supervisors.
- Work on fitting the system into the ARD process.

(8. Chuck Meyer: Will you continue using the SNAP System in your class next year? "Yes, but not in the summer course, where I don't have as much contact with them.")

PAGES 41 THROUGH 46 HAVE BEEN OMITTED FROM THIS REPORT.

Part 4: The SNAP System

The SNAP System consists of computer software and written materials as described below. The software requires an IBM or compatible computer with a hard disk and at least 640 K of RAM. We recommend a computer with an 80286 or faster processor to increase execution speed.

Computer Software

Knowledge Bases

Text versions of the expert system knowledge bases--Learning Strategy Selector (file name: LRNSEL) and Behavior Strategy Selector (file name: BEHSEL) are listed on page 237 and page 311. These knowledge bases are written for an expert system development system called KES that is distributed by Software Architecture and Engineering, 13100 Worldgate Drive, Suite 340, Herndon, VA 22070-4382 (703) 318-1000. These knowledge bases conform to the syntactical and structural rules for version 2.5.2 of the HT subsystem of KES.

Parsed Knowledge Bases

Once knowledge bases are written, they must be converted into a form the computer can use efficiently. In KES, this process is called "parsing", and it is accomplished with a parser program called HTP.EXE. This program checks the structure and syntax of the knowledge base and converts it into a parsed knowledge base. The SNAP System includes two parsed knowledge bases -- LRNSEL.PKB and BEHSEL.PKB -- which are the converted versions of the knowledge bases listed on pages 237 and 311.

You do not need the parser program (HTP.EXE) to operate the SNAP System since the knowledge bases have already been parsed. However, if you want to modify the SNAP System or develop a new expert system, you can purchase the KES development system including the parser program from Software Architecture and Engineering at the address above.

HTR.EXE

HTR.EXE is a KES System program that is required to run the SNAP System parsed knowledge bases. It allows the computer to interpret the parsed knowledge bases and conduct SNAP System consultations.

Batch Programs

Several batch programs were developed to facilitate the operation of the SNAP System. These are listed on page 380. These programs allow the user simply to enter the word SNAP to call up a menu of possible options. Also, one batch program (FC.BAT) is needed during the operation of the Behavior Strategy Selector.

How to obtain the SNAP System Software

Copies of the SNAP System software can be obtained from the Institute for the Study of Exceptional Children and Youth, Department of Special Education, University of Maryland, College Park, MD 20742. Please contact the Institute for information on how to order this software.

The KES runtime software and license for the SNAP System are provided without charge by

Software Architecture and Engineering. The following conditions apply to the use of this free software and license:

1. Distribution is limited to this application (SNAP System).
2. Distribution is limited to educational institutions.
3. No portion of the KES development system is included in this distribution.
4. This distribution does NOT include any support from Software Architecture and Engineering to SNAP System users.

Written Materials

Learning and Behavior Strategies

One-page summaries of all the strategies that can be recommended by the expert systems are included in this report. Strategies for the Learning Strategy Selector begin on page 50 and those for the Behavior Strategy Selector begin on page 178. A full source reference is included with each summary, allowing the user to obtain further information on each strategy.

Recommendations for Implementing the SNAP System

Based on our experience with the SNAP System, we offer the following guidelines to promote its meaningful implementation.

1. Administrative support is essential.
2. As much as possible, SNAP needs to be integrated into the problem solving structure already in place, so that it is appropriated. As an add-on, it may be a turn-off! As an administrator's mandate, it is sure to be a turn-off!
3. Implementation may be seen as a multi-phase "infusion" process. Four phases are:

Phase I: Awareness

Make teachers aware of the potential of the system.

Phase II: Initial Training

Help teachers learn how to use the system.

Phase III: Implementation

Provide staff development, as needed, to assist teachers in becoming users. Some teachers will use the system readily, while others will require some administrative orchestration of time and support. Problem solving meetings may be held to help teachers help one another.

As this phase evolves, teachers need to develop a sense of ownership of SNAP. Ideas for implementation can be elicited from them, and they can plan how they will become SNAP advocates on the faculty.

Phase IV: Acceptance

Effectiveness throughout Phases I-III should assure the place of the system in the

school or center. The hallmark of this phase is that the system has become integrated into the problem solving structure.

Outcome: Successful infusion has the potential of reordering teachers' attitudes toward some of the problems they face each year because they may come to feel more empowered to make changes.

4. A SNAP facilitator is critical. The facilitator is a broker, a champion, an advocate, and is part of the problem solving process. As a change agent, the facilitator is a key figure in all of the phases of the "infusion" process.

The facilitator should work with the administration and with teachers to use SNAP to produce change.

5. If teachers are to be selected as initial users in a school, they should be people with whom others identify. Their successes will lead to use by their colleagues.

6. Teachers who are most likely to choose to consult SNAP include:

- a. Beginning teachers
- b. Problem solvers
- c. Teachers who focus on processes and patterns
- d. Teachers in new roles, making them "beginners" again
- e. Workshop/course participants where SNAP use is assigned
- f. Teachers who help other teachers

7. One or more of these factors help make SNAP use gratifying for teachers:

- a. They experience a successful consultation and their implementation of recommended training options runs smoothly.
- b. They help others learn about using SNAP as a problem-solving resource.
- c. They share classroom techniques recommended by SNAP with colleagues.
- d. There is increased recognition for teachers who use SNAP.

8. SNAP should have a place physically that is conducive to staff use. Several important features are:

- a. Full copies of commonly-used source materials to supplement the one-page summaries.
- b. A table for using the materials. Workspace large enough for committee meetings/discussion groups is recommended.
- c. An area that is close enough to the building "traffic" that its visibility reminds people it is there.
- d. Posters, banners, signs, and flyers all help to advertise SNAP.
- e. Access to a copying machine or a plan at the site that provides users with copies soon after their consultation.

9. Prepare for loss of printed materials. You will probably want to arrange for copying your printed materials and storing your back-up set in a separate room that is not generally available to the majority of your users.

Learning Strategies in the Expert System Knowledge Base

Below is a listing of the strategies that may be recommended by the Learning Strategy Selector. Follow this listing are one-page summaries of each strategy.

- L1 Tape Recording Educational Materials
- L2 Modeling Mental Processes to Help Poor Readers Become More Strategic
- L3 Helping Readers Understand Different Types of Questions
- L4 Authors Chair/Peer Conferencing
- L5 Dialogue Journals
- L6 Improving Reading Comprehension with Semantic Mapping
- L7 Critical Listening and Reading in Remedial Reading
- L8 Teaching Expository Text Structure
- L9 Motor Imaging: A Reading Vocabulary Strategy
- L10 RATE: A Reason to Read
- L11 Language Interventions in Natural Settings
- L12 Song Picture Books
- L13 Cloze Procedure
- L14 Learning Centers
- L15 Vocabulary Centers
- L16 Summarization Skills
- L17 Text Lookback Strategy
- L18 REQUEST Procedure for Reciprocal Questioning
- L19 Developing Reading Fluency in LD Students
- L20 Analyzing Spelling Error Patterns for Remediation
- L21 Reading Readiness Problems and Solutions
- L22 Direct Instruction of Mathematics
- L23 Language Experience for Problem Solving in Mathematics
- L24 Mathematics and the Special Student
- L25 Assessing Arithmetic Skills
- L26 Adapting Elementary School Mathematics Instruction
- L27 Peer Tutoring
- L28 Word Processing to Improve Student Writing
- L29 Life Size Learning Games
- L30 Language Experience Approach in Primary Science
- L31 Spelling
- L32 Dictation: An Additional Student Team Learning Technique
- L33 Classroom Reading Incentive Programs
- L34 Diagnostic and Remedial Reading: Chapter on Classroom Diagnosis
- L35 Integrating Reading Instruction in Science and Social Studies
- L36 Fluency for Everyone
- L37 Adapting the Instructional Environment for Mainstreaming
- L38 Ten Ways to Encourage Students to Speak Up
- L39 Grading: Elementary
- L40 Specific Adaptive Strategies
- L41 Classroom Modifications Based on Handicapping Conditions
- L42 Assessment
- L43 Fernald Technique: VAKT
- L44 Teaching Older Children To Read
- L45 Reading in the Content Areas
- L46 Peer Tutoring Math Facts

- L47 All Children Can Write
- L48 Word Attack Interventions
- L49 Predictable Books
- L50 The Story Frame Approach
- L51 Writing as a Tool to Improve Content Area Reading
- L52 Questioning Skills
- L53 Strategies to Extend Student Thinking
- L54 Reading Difficulties: Adapting Instruction
- L55 Reading Difficulties: Correcting Word Recognition
- L56 Reading Difficulties: Correcting Decoding Skill Deficiencies
- L57 Reading Difficulties: Left Right Directionality
- L58 Tactics for Teaching Arithmetic
- L59 Cooperative Learning and Computers in Math Classrooms
- L60 Managing Special Groups in Elementary School
- L61 Managing Special Groups in Secondary School
- L62 Teaching Writing to Learning Disabled Adolescents
- L63 Assessing Mathematics Skills in LD Adolescents
- L64 Teaching Mathematics to Learning Disabled Adolescents
- L65 Teaching Listening Strategies to LD Adolescents
- L66 Teaching Speaking Strategies to LD Adolescents
- L67 Teaching Vocabulary to LD Adolescents
- L68 Increasing LD Adolescent Reading Comprehension
- L69 Developing Ld Adolescent Reading Flexibility
- L70 Helping Ld Adolescents Develop Study Skills
- L71 Remembering
- L72 Textbook Usage
- L73 Visual Aids
- L74 Skimming and Scanning
- L75 Test Skills
- L76 After Your Students Write
- L77 Teaching Time Using the Whole Clock Method
- L78 It Is About Time
- L79 Every Minute Counts and Its Sequel
- L80 Motivate Reluctant Learning Disabled Writers
- L81 Study Skills
- L82 Individualizing Mathematics Instruction
- L83 Mainstreaming and Cooperative Learning Strategies
- L84 Using the DRA to Teach Literary Comprehension
- L85 Graphic Organizers
- L86 Vocabulary Game
- L87 Improving Comprehension
- L88 Self Correction for Improving Writing Skills
- L89 Tips for Being Better Organized for School
- L90 Increasing Critical Reading in Junior High Classrooms
- L91 Low Stress Algorithms
- L92 Grouping and Special Students
- L93 Clozing in on Comprehension with the Cloze Story Map
- L94 Grading: Secondary
- L95 Classroom Accommodations for Mainstreaming
- L96 Helping Students Develop Their Metacognitive Skills
- L97 Structuring Classrooms for Thinking Skills
- L98 Show and Tell Write and Read

- L99 Teacher Behaviors that Enable Student Thinking
- L100 Practical Strategies for the Direct Teaching of Thinking Skills
- L101 Cooperative Scripts For Paired Learning
- L102 Student Teams – Achievement Divisions
- L103 Reciprocal Training
- L104 Team Assisted Individualization
- L105 Teaching Expressive Skills: Handwriting
- L106 Applications Of Mathematics in Other Subject Areas
- L107 Mathematics And Vocational Preparation
- L108 Fractions Decimals Percentages
- L109 Geometry Concepts And Skills
- L110 Estimating Text Readability
- L111 Managing The Assignment
- L112 Accommodations For Students With Organizational Problems
- L113 Plain Paper For Writing
- L114 Tape Recorders For Dictating Imaginative Stories
- L115 Teaching Listening Skills
- L116 Large Group Presentations And Discussions
- L117 Structuring Independent Work
- L118 Individualized Programming
- L119 Increasing Attentiveness – Decreasing Withdrawal
- L120 Meeting Needs Of A Restless Socially Over Involved Student
- L121 Teacher Verbal Strategies
- L122 Contingency Contracting
- L123 Motivation
- L124 Setting Goals For Students
- L125 Strategies To Increase Involvement

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L1 TAPE RECORDING EDUCATIONAL MATERIALS

SOURCE: Deshler, D.D., & Graham, S. (1979). Tape recording educational materials for secondary handicapped students. Teaching Exceptional Children.

DESCRIPTION: Developing taped materials often helps compensate for students' specific disabilities. Guidelines are provided which stress that taping materials may be more than verbatim taping of texts and lectures. Effective use of taping may, in fact, help students develop their study skills.

SUMMARY/GUIDELINES:

For expository text material and some long narrative selections:

1. Preview material to see what should be taped and what skills are to be reinforced.
2. Prepare tape:
 - a. Read and explain (optional) title.
 - b. Relate this selection to current area of study.
 - c. Read introduction verbatim.
 - d. Tell main ideas that will be covered.
 - e. Read subheadings and main ideas verbatim.
 - f. Paraphrase to provide key information, such as: names, dates, events, lists, answers to study questions, new terms, important concepts. Provide concrete explanations of abstract terms.
 - g. Provide repetition of key terms and concepts.
 - h. When possible, relate new information to prior knowledge.
 - i. Guide student's use of boldface print, pictures, graphs, charts, and other visuals.
 - j. Selectively read passages verbatim to add emphasis or to contribute to student comprehension.
 - k. Read summary verbatim.
 - l. Read end of chapter questions and guide student in developing answers.
3. If possible, mark student's text to help student see how the tape matches it. Marks (e.g., vertical lines) can show parts read verbatim, while other marks (e.g., wavy lines) can show parts that are paraphrased. Other indicators (e.g., a series of vertical dots) can show parts that are omitted. Key words can be underlined. An asterisk can tell the student when to turn the tape on or off.

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**L2 MODELING MENTAL PROCESSES TO HELP POOR READERS BECOME MORE
STRATEGIC**

SOURCE: Duffy, G.G., Roehler, L.R., Herrmann, B.A. (1988).
Modeling mental processes helps poor readers become strategic
readers. The Reading Teacher, 762-767.

DESCRIPTION: Poor readers often benefit from having
demonstrations of the mental, as well as the physical, aspects of
reading. Mental modeling performed by the teacher is a technique
that helps poor readers learn how successful readers think when
they read. This teaching activity explains the rationale for
modeling mental processes and uses teacher dialogues for
illustration.

SUMMARY/GUIDELINES:

To provide mental modeling, the teacher focuses on (1)
transferring metacognitive control from themselves to the
students, and (2) modeling actual mental processes, not just the
procedural steps. Effective mental modeling informs students
about the thinking of "expert" readers/thinkers, which allows
them to direct their own inferential reasoning when
reading/thinking independently. The teacher should follow these
steps:

1. Present the strategy in the context of connected text.
2. Use a think aloud approach, describe and demonstrate the
mental processes you use when reading the text. Point
out that each person thinks about text differently, and
that you are modeling your thought processes; their
thinking processes should become similar to yours with
practice.
3. Provide examples and nonexamples which demonstrate
flexibility of thinking.
4. Intersperse modeling with student opportunities for
practice. When students practice, provide support and
guidance. Provide elaborative instructional feedback
as needed.

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L3 HELPING READERS UNDERSTAND DIFFERENT TYPES OF QUESTIONS

SOURCE: Hahn, A.L. (1985). Teaching remedial students to be strategic readers and better comprehenders. The Reading Teacher.
Tierney, R.J., Readence, J.E., & Dishner, E.K. (1985). Reading strategies and practices, 2nd ed. Boston: Allyn and Bacon, Inc.

DESCRIPTION: Students need to be strategic when they read expository texts. A way to help is to teach them to recognize certain types of questions that are to be answered with certain types of textual information. A step-by-step procedure for teaching question-answer relationships is given.

SUMMARY/GUIDELINES:

Students are taught task demands of different types of questions. Plan for two phases of training -- one week of intensive training followed by maintenance activities.

Intensive Training:

Lesson One - Give students the purpose of learning the differences between text-based and knowledge-based responses, which are called "Right There," "Think and Search," and "On My Own" responses. Give students practice discriminating among these types. Stage this lesson so that first students have passages with questions (Q), answers (A), and relationships (QAR) already identified. Next, give the questions (Q) and the answers (A) and have students identify the relationships (QAR). Next, have the students determine QARs and respond with answers.

Lesson Two - Give time for review then provide practice with longer passages. It is important to provide feedback that tells why an answer is acceptable for both accuracy and use of the strategy.

Lesson Three - Extend the task to a passage approximately the length of selections commonly used for instruction. Divide the selection into four parts with two questions of each of the three types for each section. Have students answer the questions for each section. Do the first of the four sections together as review, then have students complete the rest independently.

Lesson Four - Use classroom materials (e.g., a science chapter) with six QAR questions that students are to answer after reading the chapter.

Maintenance: Weekly review and practice lessons. Make lessons fun when possible, and provide systematic practice with content material.

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L4 Authors Chair Peer Conferencing

SOURCE: Author's Chair/Peer Conferencing. Readence, & Dishner. (1985). Reading strategies and practices: A compendium, 2nd ed. Newton, MA: Allyn and Bacon, Inc., 99-103.

DESCRIPTION: Classroom practice combining reading and writing helps students see relationships between reading and writing while improving their performance in both areas. Pairing students for peer conferencing helps them acquire several unique sensitivities, including an appreciation of reading and writing as constructive activities. Procedures for implementation are given.

SUMMARY/GUIDELINES: Peer conferences requires the students to act as advisors and evaluators along with the teachers in reviewing the work of peers.

GENERAL GUIDELINES:

1. Students should have the opportunity to write for longer than 30 minutes twice a week and should be given enough time to write extended stories and reports of their own choosing.
2. The teacher gives the central role to the students.
3. When using a Reading and Writing in Progress Conference, the student who calls for the conference defines the help needed, presents what has been accomplished so far, explores reasons for being stuck, or presents what they plan to do next.
4. When using an End of Book Conference, the student can read the entire story or report or interesting sections of a book aloud or discuss what it was like to read or write the story.
5. When using a Peer Author Conference, another student presents the work of a peer.
6. After sharing, the student opens the floor to peer reactions, comments and questions.
7. Peers then give supportive comments or ask questions.
8. The student who desired the conference is responsible for entertaining the questions and ideas of peers.
9. Provide students with encouragement, support and repeated opportunities to make the conferences become worthwhile.
- A. Uses of the Reading and Writing in Progress Conference:
to gain feedback on how to begin a story, to receive input from other students on a book they are about to read, to share plans or brainstorm, to share what they have read or written so far or what their next steps are to be.
- B. Uses of the End of Book Conference:
to provide students the opportunity to share their reading and writing experiences and products, to provide peers a synopsis of what they have written or read.
- C. Uses of the Peer Author Conference:
to provide an author with the opportunity to hear a peer report on her work and to ask questions of that peer and to allow peers to report and field input on the work of an author they know.

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L5 DIALOGUE JOURNALS

SOURCE: Gambrell, L.B. (1985). Dialogue journals: Reading writing interaction. The Reading Teacher.
Tierney, R.J., Readence, J.E., & Dishner, E.K. (1985). Reading strategies and practices, 2nd ed. Boston: Allyn and Bacon, Inc.

DESCRIPTION: Dialogue journals emphasize meaning while providing natural, functional experiences with both reading and writing. The technique is well known for building writing fluency and for developing rapport between teachers and students. These selections prepare teachers for implementing the technique in their classrooms.

SUMMARY/GUIDELINES: The dialogue journal interaction is a conversation between a teacher and a student. Teachers should plan to:

1. Recommend that students use a bound composition book.
2. Encourage students to write about anything they want to, but recommend a topic -- e.g., favorite movie, a family trip, reactions to a recent event -- if they can't think of a topic, particularly when the activity is still new.
3. For best results, have students write daily for the same amount of time, at the same time of day.
4. Respond with written communication as often as possible.
5. Teacher's Role:
 - a. Protect privacy. Don't share journal contents without the student's permission.
 - b. Be sincere and involved. Share ideas, focus on communication, ask and answer questions, make honest remarks out of personal interest.
 - c. Avoid being judgmental. Do not make corrections. Rather than correct misspellings, model the correct spelling in the response.
 - d. Be honest. If student language or journal content is felt to be an impediment to further communication, tell the student to change it.
 - e. Be positive. Find something good to say. Avoid sarcasm. Encourage.
 - f. Help dialogue journal writing remain interesting. Take a temporary break if the routine begins to seem tedious or uninteresting.
 - g. Be realistic with students and yourself regarding how often you can respond. Don't make promises you can't keep.

L6 IMPROVING READING COMPREHENSION WITH SEMANTIC MAPPING

SOURCE: Flood, J. The text, the student, and the teacher:
Learning from exposition in middle school. The Journal
of Reading.
Johnson, D.D., Pittelman, S.D., & Heimlich, J.E
Semantic mapping. The Reading Teacher.
Sinatra, R.C., Stahl-Gemake, J., & Berg, D.N. (1984).
Improving reading comprehension of disabled readers
through semantic mapping. The Reading Teacher.

DESCRIPTION: Semantic Mapping, also known as Webbing, involves a visual presentation of information and is used by teachers of all levels to motivate and actively involve students in the thinking-writing-reading process. This training option is a collection of three articles which explain this technique and how it helps improve reading comprehension.

SUMMARY/GUIDELINES: Mapping the ideas and vocabulary of text assignments helps students understand relationships. The actual form the map should have depends on the content. The lesson a teacher plans for using the mapping technique depends on the purpose of the lesson. Semantic mapping is useful at pre-reading and post-reading and writing stages of lessons. Also, the technique is a powerful way to build students' vocabulary. A sample vocabulary lesson (from the Johnson, Pittelman, & Heimlich article) follows:

1. Choose a word central to the topic the class will study.
2. Write the word on the blackboard, chartpaper, or a transparency.
3. Encourage the class to brainstorm words related to the key word. Write these words, grouped in categories that students name, around the key word for all to see.
4. Have students work individually to come up with as many more words as they can that are related to the key word and list these by categories on a piece of paper.
5. Have students share their lists orally and add to the class list in categories.
6. Where category names have not yet been identified, have students determine categories. Write these on the web or map that is emerging during their brainstorming process.
7. Discuss the entries on the web or map. Encourage students to become aware of new words and consider the relationships that appear.

During a pre- or post-reading lesson, the teacher similarly structures key concepts in a graphic presentation. To move from a vocabulary lesson or a reading lesson to writing a composition is simply a matter of using the map or web as a graphic outline.

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L7 CRITICAL LISTENING AND READING IN REMEDIAL READING

Source:

Critical listeners become critical readers in remedial reading class, By: Gloria M. Boodt in The Reading Teacher, January 1984.
(Pub: IRA)

Description:

Consistent direct instruction in critical listening can improve students' reading comprehension. The positive effects of a critical reading and listening approach can lead to increased enjoyment of reading. The article tells how to implement the approach and explains the research which supports its use.

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L8 TEACHING EXPOSITORY TEXT STRUCTURE

SOURCE: McGee, L.M., & Richgels, D.J. (1985). Teaching expository text structure to elementary students. The Reading Teacher, 739-748.

DESCRIPTION: This training option presents a step by step method of helping students understand the meaning of text structure and how to recognize -- and write -- the five major forms. Though the article is aimed at elementary teachers, the technique can be easily adapted for older students simply by removing or modifying the step involving manipulatives.

SUMMARY/GUIDELINES:

- A. Teach the general concept of text structure.
 1. (This step is critical for young students and should be omitted or modified for older students.)
Provide concrete experience by building a demonstration tower out of different size boxes. Discuss the structure. Have students build their own towers; even though their boxes may be different from yours, their towers should be modeled after yours. The point is that the structure is the same even though details of content differ. Tell how this concrete example is analogous to text structures.
 2. Use graphic organizers to demonstrate two identical text structures which have different content.
- B. Teach how to recognize 5 common expository text structures: description, collection, causation, problem solution, comparison (Figure in article gives sample paragraphs with "clue words" for each structure.)
 1. Select 5 short, clear examples from course materials.
 2. Prepare a graphic organizer for each example.
 3. Introduce the graphic organizer for one of the examples. Select one example to begin with, and teach the passage by first presenting the graphic organizer. Discuss key ideas and their relationships.
 4. Have students compose a paragraph based on this graphic organizer. (Remember they have only seen the graphic organizer so far.) Guide students to see the usefulness of the graphic organizer and to use the ideas and the suggested relationships in their compositions. Work on appropriate connecting words. Identify the structure type. Revise.
 5. Compare students' compositions with the original passage. Discuss similarities and differences.
 6. Use this approach to teach the other four structures.
- C. Extend this reading-writing skill by providing similar practice with:
 1. less obvious structures, and
 2. longer structures.

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L9 MOTOR IMAGING-A READING VOCABULARY STRATEGY

Source:

Motor imaging: A reading-vocabulary strategy, by: Ula Price in
The Journal of Reading, April 1985. (Pub: IRA)

Description:

Motor imaging uses a word learning strategy based on psychomotor associations. Steps are detailed to help teachers see how they can teach their students to connect a new word with a pantomime as well as a language meaning.

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L10 RATE: A REASON TO READ

Source:

RATE: A Reason to Read, by: P.J. Jamison & L.A. Shevitz, in
Teaching Exceptional Children, Fall 1985. (Pub: CEC).

Description:

Motivation to read is such an important factor in learning to read that motivational strategies are often needed. RATE for Read And Then Evaluate invites students to read library books then evaluate them according to student-determined criteria. This article reports the outstanding success the RATE program has had in a school.

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L11 LANGUAGE INTERVENTIONS IN NATURAL SETTINGS

SOURCE: Cavallaro, C.C. (1983). Language interventions in natural settings. Teaching Exceptional Children, 65-70.

DESCRIPTION: Teachers of handicapped children often have problems getting them to use language spontaneously. This training option recommends an approach called "milieu teaching" and describes how and when teachers can encourage and reinforce interactions using this method.

SUMMARY/GUIDELINES:

Milieu teaching, according to these steps, is a way of making incidental teaching focused and systematic. The first goal is to make children aware that they can use language to obtain objects and attention. The second goal is to make them aware that they should use appropriate forms of language in a social context. The teacher follows this strategy to elicit appropriate language and delivers the desired object or assistance to the child at the time that is best suited to promoting language development:

*** When the child wants to express a need:

1. Focus attention: Look at child, remain silent, expect child to respond. (If language is appropriate, deliver object or assistance with praise for language.)
2. Prompt to the degree that is necessary to elicit appropriate language. Prompts are as follows:

Type:	When to use:	Example:
Open Question	If child knows answer. You have heard child say it.	"What do you want?"
Request for language	If you know child knows what to say.	"Tell me what you want." "Use a whole sentence."
Partial prompt	If child has said it in the past but not often or with prompt.	"It's the same color as your shirt . . . say, bl . . ." "Say, I want"
Full Prompt	If you have not heard child say it or has said it only after prompting.	"Say, blue." "Say, I want a blue truck."

3. Deliver object or assistance when the child responds appropriately. Deliver praise (e.g., "Good! You said blue truck!").

***Remember to be focused, attentive, brief, and pleasant!

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L12 SONG PICTURE BOOKS

SOURCE: Bromley, K.D., & Jalongo, M.R. (1983). Song picture books and the language disabled child. Teaching Exceptional Children, 115-119.

DESCRIPTION: With a rich potential for child involvement, song picture books can facilitate the development of language competence. Procedures for implementation are listed, and a bibliography of songs is provided.

SUMMARY/GUIDELINES:

Teachers are encouraged to explore the use song picture books for many reasons. The following list gives many of the authors' uses for this category of children's literature.

1. For language-disabled children who have difficulty discriminating and producing speech sounds, the learning of songs can help to overcome these problems. Repetitive listening and singing can promote auditory discrimination, pronunciation skills, skills of structural analysis and vocabulary, as well as general listening skills and heightened awareness of language.
2. Activities, such as the following, promote semantic knowledge:
original: Hush little baby don't say a word
Mama's going to buy you a mocking bird.
If that mocking bird don't sing
Mama's going to buy you a diamond ring.

model: Hush little (noun) don't you (verb)
Mama's going to buy you a (adject.) (noun).
If that (adject.) (noun) (verb) (verb)
Mama's going to buy you a (adject.) (noun).

children's version:
Hush little angel don't you cry
Mama's going to buy you a pizza pie.
If that pizza pie gets stale
Mama's going to buy you a raccoon tail.
3. Repetition in song lyrics can be a pleasurable experience which provides opportunities for hearing and pronouncing words in a natural way.
4. Responding to questions after song verses can build skills of sequencing and factual recall.
5. Songs can help students make links between thoughts and written or spoken words, a crucial skill for some children.

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L13 CLOZE PROCEDURE

SOURCE: Brigham, B.W. (ND). The cloze procedure. Unpublished manuscript, Reading Center, University of Maryland, College Park.
Tierney, R.J., Readence, J.E., & Dishner, E.K. (1985). Reading strategies and practices, 2nd ed. Boston: Allyn and Bacon, Inc.

DESCRIPTION: The Cloze procedure has two uses, diagnostic and instructional. This training option explains both uses and tells how to prepare Cloze materials. As a diagnostic technique, the Cloze gives a very close estimate of how well particular students will perform with text material. As an instructional technique, it helps students grasp meaning by using contextual information.

SUMMARY/GUIDELINES:

A. For diagnosis:

1. Select three 250-350 word samples from text -- from the beginning, the middle, and the end.
2. Prepare written directions: "This exercise will help me estimate the readability of this material. Think of yourself as the author and fill in each blank with the one word that you think is best. Hand it in when you finish."
3. Provide a complete sentence at the beginning and end of each sample.
4. Deletion format (between first and last sentence):
 - 50 deletions, equally-sized, per sample
 - narrative material: every 5th word
 - expository material: every 10th word
 - do not delete proper nouns or numbers (go to next word)
5. Administration: give several warm-up Cloze activities in advance. Administer 3 samplings on 3 consecutive days. After each sampling, eliminate all students who score 21 or below; the material is TOO difficult. Use this guide for interpreting students' scores on each sample:

35+	(70%+)	=	Independent Level
22+	(44%+)	=	Instructional Level (requires instructor's help)
22-	(44%-)	=	Frustration Level (far too difficult)

B. For instruction: Teacher decides what words to omit, according to instructional purpose, and whether or not to provide multiple choice alternatives. The purpose of using the Cloze instructionally is to help students improve their ability to derive meaning from context, but teachers may create innovations that help their students improve their understanding of semantics. Parts of speech lessons are very well suited to work with the Cloze. The Cloze can even be combined with semantic mapping (see L93).

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L14 LEARNING CENTERS

SOURCE: Eckert, V., & Eckert, J. (1980). Learning centers. Northbrook, IL: Hubbard Scientific Company.
Pilato, V.H., & Lee, B. (1985). Learning centers: Individualization and diagnosis. Unpublished manuscript, Institute for the Study of Children and Youth, University of Maryland, College Park.

DESCRIPTION: Learning center are a valuable addition to the classroom for many reasons, including reinforcing new skills, diagnosing problems in skill development, and developing independence with new skills. This training option gives information about learning centers with suggestions of numerous types of centers.

SUMMARY/GUIDELINES:

1. Determine the types of centers that would help the class.
 - a. Centers for discovery learning and/or creativity
 - b. Skill development centers
 - c. Free reading center where many high interest books are available
2. Plan for the amount of space needed in the classroom, including space for storage.
3. Determine the purposes and objectives of each center.
4. Identify the skills or concepts to be taught.
5. Plan for the range of student responses; plan for the sequence of skills.
6. Assemble the materials to be included in the centers. Make sure labeling of materials is clear enough for efficient use.
7. Devise a method of evaluating students' performance. Centers should have either a self-checking component, or they should be built to fit into the teacher's classroom management plan in a way that allows for checking with the student upon completion of the task.
8. Develop record keeping procedures that allow for students and teacher to easily check student progress.
9. Provide explicit rules for center use that are at a minimum but fit well with general class rules.
10. Develop schedule for centers that allows all students to have adequate center time on a daily or weekly basis. The schedule should be visible to students and teacher.
11. Plan how to integrate learning centers with the rest of the curriculum. Remember that centers have the purpose of reinforcing not introducing new skills.
12. Plan to introduce each new center to class. Give a clear explanation of the purpose, the types of activities and materials, how the materials are labeled, and a step by step demonstration of the center. Demonstrate any equipment (e.g., projector or record player) that students will use.

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L15 VOCABULARY CENTERS

SOURCE: teacher made

DESCRIPTION: Instructional centers are useful for reinforcing skills and diagnosing deficiencies in language arts. This training option provides sample learning centers useful for extending elementary and middle school students' vocabulary development. This training option demonstrates how to develop generic vocabulary centers that are appropriate for most vocabulary lists.

SUMMARY/GUIDELINES:

Teachers may model their own vocabulary centers on the samples in this training option. (See training option L14 for more information on developing and using learning centers.) These centers were hand made using standard size file folders. Directions are written on the outside front of the folder, and activities are written on the inside. In each center the student is to use the current set of vocabulary words to either sort words or to write sentences according to directions. This training option demonstrates that vocabulary work consists of practice with many skills. The skills and subskills in this set of centers are:

- Classification: people, places, things, action (verbs), description (adjectives), adverbs
- Vowels and Consonants: o, hoe; a, came; i, tie; e, meat; u, few; ar, far; hw, when; f, phone; kw, quiet; sh, shoe; ch, catch; shen, mention; tw, twin; spl, splash; g, ghost; k, Christmas.
- Style: rhyming words, mood words, descriptive words, analogies, guide words (as found in a dictionary).
- Comprehension: find words that show part-whole relationships, find words that can be arranged in a sequence, find setting words, make a sentence and pick out subject and verb, find word combinations that show cause-effect relationships, use words to make similes.
- Word Meanings: antonyms, synonyms, homonyms, roots.
- Sentence Building: write sentences that demonstrate: imperative sentence, declarative sentence, compound verb, plural nouns, possessive nouns, possessive pronouns, question marks, noun-verb pattern, noun-verb-noun pattern, compound subject, quotation marks.
- Sentence Building and Analysis: contractions, proper nouns, common nouns, abbreviations, suffixes, prefixes.

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L16 SUMMARIZATION SKILLS

SOURCE: Hare, V.C., & Borchardt, K.M. (1983). Direct instruction of summarization skills. Unpublished manuscript, College of Education, University of Illinois, Chicago.

Hidi, S. & Anderson, V. (1986). Producing written summaries: Task demands, cognitive operations, and implications for instruction. Review of Educational Research, 56, 473-493.

DESCRIPTION: It is very important to see that students can summarize what they read in school. Summarizing helps students find the main idea and recall what they read. It also helps them clarify the meaning and the significance of what they read. This teaching option gives steps for teaching summarization skills and provides an indepth discussion of summary instruction.

SUMMARY/GUIDELINES:

Summarizing involves identifying the main idea and important subordinate ideas in the text. Direct instruction in how to write summaries should include the elements of "effective teaching" (including purpose setting, modeling, progression from easy and familiar to more difficult and less familiar, progression from concrete to abstract, checks for understanding, guided and independent practice, corrective feedback, and additional practice for independent use of the skill).

How to write summaries of text material involves teaching students to do the following steps. These steps, though, may be very difficult for students to master, so it is important to provide sufficient "effective teaching" at each step.

1. Find the topic. Make sure students understand the text by asking themselves "What is this story about?" Allow students to look back in the text to check their recall and their interpretation.
2. Find the main ideas of each paragraph. Often authors write a topic sentence that gives the main idea. These topic sentences can be included in the summary.
3. Find the important information sentences. Try to think of a word or phrase name for lists of items or similar ideas. Find ideas that relate to one another to combine into one statement.
4. Leave out the unnecessary detail. Some information is repeated in a passage in a number of different ways. Other information is simply unimportant. These details should be left out of a summary.

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L17 TEACHING LOOKBACK STRATEGY

SOURCE: Garner, R., Hare, V.C., Alexander, P., Haynes, J.A., & Winograd, P. (1985). Inducing use of a text lookback strategy among unsuccessful readers. American Education Research Journal.

Leone, P.E., & Reis, R. (1985). Teaching text lookbacks to mildly handicapped students. Journal of Reading.

DESCRIPTION: Unsuccessful readers often need to learn how important it is to simply look back at previously read material to locate information. Often they need to learn that looking back is legitimate -- not cheating. Steps for teaching a lookback strategy are given, as well as a study which supports the use of the approach.

SUMMARY/GUIDELINES:

1. Determine which students need lookback training by giving a task of reading a 300-500 word passage and answering questions, some requiring looking back to find the answers. Students who answer most questions correctly and describe an efficient method of returning to text for answers may not need lookback training.
2. Plan training for 3-5 days with groups of not more than 8.
3. Students will require guidance and feedback. To help them monitor themselves, provide these Guidelines:

(1) Why should I look back? I will look back to pages I have read so I can locate information I don't remember.

(2) When should I look back? I will look back when I think the questions ask about what the author or article said. I will not look back when the questions ask me what I think.

(3) Where should I look? I will skim the article and look for key words and phrases. I will then reread sentences and entire paragraphs if necessary.

4. Lessons:

Day 1: Hand out a two-page, 200-300 word passage. "Read silently. You will answer 3 questions." After reading: "As I ask you a question, you may look back at pages 1 and 2 to find the answers." Check their understanding of directions. Ask the questions. Give practice with another passage, but first write Guideline #1 on the board. Lead brief discussion. After practice with this passage, ask students to summarize what they did during class.

Day 2: Review. Repeat Guideline #1, and write Guideline #2 on board. Teach differences between text-based and reader-based questions. (See L3: Question Answer Relationships.) Follow steps of the first day, using both types of questions.

Day 3: Review. Repeat Guidelines #1 and #2. Write Guideline #3 on board. Using text from Day 2, model skimming as replacement for rereading. Demonstrate how to use lookback with questions. Using Guidelines, practice with text somewhat longer than Day 2 text.

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L18 REQUEST PROCEDURE FOR RECIPROCAL QUESTIONING

Source:

Author's Chair/Peer Conferencing. Readence, & Dishner. (1985).
Reading strategies and practices: A compendium, 2nd ed. Newton,
MA: Allyn and Bacon, Inc., 58-66.

Description:

The ReQuest Procedure is designed to help students: (1) Form their own questions about what they are reading and develop a questioning attitude (2) Become more purposeful readers (3) Improve their independent reading comprehension skills. Steps of the procedure are provided.

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L19 DEVELOPING READING FLUENCY IN LD STUDENTS

Source:

Developing Reading Fluency in Learning Disabled Students, by:
W.A. Henk, J.P. Helfeldt, J.M. Platt in Teaching Exceptional
Children, Spring 1986. (Pub: CEC)

Description:

Many learning disabled students experience severe oral reading difficulties. Six techniques are presented to help improve their oral reading and to help them perceive themselves as more effective readers an important component in a reading improvement program.

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L20 Analyze error patterns to remediate severe spelling difficulties

SOURCE: Ganaschow, Leonore (December 1984). Analyze error patterns to remediate severe spelling difficulties. The Reading Teacher.

DESCRIPTION: Observing students' error patterns gives teachers insights into student hypotheses about the writing system. It also helps with diagnosis of individual patterns of strengths and weaknesses that can be used in planning instruction. A useful technique is described.

SUMMARY/GUIDELINES: Following are guidelines of how to use error pattern analysis to determine what disabled spellers understand about the spelling system and how to make decisions for remediation.

1. Make a chart with the following columns: a) the misspelled word, b) the word correctly spelled, c) a space to describe types of errors, and d) a space to propose remediation.
2. Collect a sample of at least 25 of the child's misspelled words.
3. Compare the child's misspelled words in column (a) with the correct spelling in column (b) to make inferences about the types of errors the child makes. Errors can be made in a number of ways. Following is a suggested method for beginning.

Break down spelling errors into good phonetic equivalents and nonphonetic spellings.

- If over 30% of the errors are nonphonetic the student should be taught basic sound/symbol relations and sound sequencing.

- If the errors are primarily phonetic, further error types need to be distinguished. One way of doing this is to categorize misspellings into:

- * words involving regular rules: one to one correspondence, common rule correspondences with several possible spellings, and rules of the language such as those governing suffix and tense endings, syllabication, and permissible letter combinations; *
- irregular words: those which cannot be predicted through rules and must simply be learned and;

- * homonyms: those which require knowledge of meanings in order to spell them.

4. Describe your inferences about the errors in column 3.
5. Decide what and how to remediate and note these strategies in column 4. Decide on strategies based on what errors are the most prominent, which error patterns will yield the most generalizability if worked on, and which types of errors best lend themselves to ease of correction for the child.

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L21 READING READINESS: PROBLEMS AND SOLUTIONS

SOURCE: Haynes, J.A., Dreifuss, S., & Adger, C.T. (1987).
Reading readiness: Problems and solutions.
Unpublished manuscript. Institute for the Study of
Exceptional Children and Youth, University of Maryland,
College Park.
Wilson, R.M., & Cleland, C.J. (1985). Diagnostic and
remedial reading for classroom and clinic, 5th ed.
Columbus: Charles E. Merrill Co.

DESCRIPTION: Reading readiness diagnostic questions are given
accompanied by techniques to help in each area of weakness.

SUMMARY/GUIDELINES:

Diagnostic Questions with ONE of the Solutions from L21:

1. Does the student have difficulty with auditory discrimination?
* Gradually provide exercises that involve finer auditory discrimination.
2. Does the student have difficulty with left to right orientation?
* Use choral reading activities. Reading in unison with at least one good oral reading model allows students practice with left-to-right word movement within a group.
3. Does the student have a tendency to reverse letters, words or phrases?
* Sit next to child when language experience stories are being written so that the child will observe the left-to-right progression of words.
4. Does the student have a tendency to omit words without distorting context?
* Reading Impress Technique: The teacher and students read in unison with the teacher modeling fluency and accuracy. After the students have read the passage with the teacher, they may read the passage alone. If accuracy is not obtained, the process should be repeated.
5. Does student habitually lose his/her place?
* First check possible vision problem. Next, have student use a line holder (e.g., index card). Eliminate this aid when the problem is eliminated.
6. Does the student have difficulty with visual discrimination?
* Use word cards (from word banks or other source) for searching activities, such as finding words that begin, or end with particular affixes, words that have double consonants or words that begin or end with a particular letter.

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L22 DIRECT INSTRUCTION OF MATHEMATICS

Source:

Direct Instruction of Mathematics, by: T. Good & D. Grouws.
(Pub: ASCD)

Description:

A highly effective format for structuring math lessons is outlined.

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L23 LANGUAGE EXPERIENCE FOR PROBLEM SOLVING IN MATHEMATICS

Source:

Mathematics and the Special Student, A "STRETCH" Teacher Education Module, published by: Hubbard, Hubbard Scientific Company, PO Box 104, Northbrook, Illinois 60062.

Description:

Language Experience Approach known more for its use in beginning reading is recommended to help children develop broader comprehension and application of mathematical concepts. The procedure is given with the report of a study which gives evidence of its effectiveness.

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L24 MATHEMATICS AND THE SPECIAL STUDENT

Source:

Mathematics and the Special Student, HUBBARD, Hubbard Scientific Company, PO Box 104, Northbrook, Illinois 60062.

Description:

The purpose of this teaching option is to assist teachers in identifying students with special learning problems in mathematics in selecting materials to use with these students and in developing strategies appropriate for use with the special student.

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L25 ASSESSING ARITHMETIC SKILLS

Source:

Mercer C.D., & Mercer, A.R. (1985). Teaching students with learning problems, 2nd ed. Columbus, OH: Charles E. Merrill Publishing Company, 172-203; 502-508.

Description:

This teaching option gives information about arithmetic assessment and provides teachers with numerous useful techniques. It stresses the importance of informal classroom measures for monitoring students' progress and planning instruction.

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L26 ADAPTING ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION

Source:

Adapting Elementary School Mathematics Instruction, by: R.A. Lambie, P.W. Hutchens in Teaching Exceptional Children. Spring 1986. (Pub: CEC)

Description:

When a mismatch occurs between a student's abilities and mathematics assignments instructional adaptations can be made to improve the student's opportunities to learn. Ten common areas of difficulty are presented with their possible causes and adaptations that can help the student overcome the difficulties.

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L27 PEER TUTORING

Source:

Peer Tutoring, Hubbard, P.O. Box 104, Northbrook, Illinois 60062.
1977.

Description:

Peer tutoring is valuable for students who need extra help who can give extra help or who need the experience of working with another person. The values of peer tutoring are presented with techniques for implementing a peer tutoring program.

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L28 WORD PROCESSING TO IMPROVE STUDENT WRITING

SOURCE:

- Jacobi, C. (1986). Word processing for special needs students: Is there really a gain? Educational Technology, 36-39.
- MacArthur, C.A. (1988). The impact of computers on the writing process. Exceptional Children, 536-542.
- Wheeler, F. (1985). Can word processing help the writing process? Learning, 54-62.

DESCRIPTION: Word processing does not teach writing, but it is a powerful tool to help students improve their writing. It encourages seeing writing as a process, while it fits well into instruction that includes student/teacher conferencing and/or peer collaboration. One researcher says that word processing for learning disabled students is such a boon that it is as though written language has been reinvented to specifically meet their needs. Advantages and uses are presented in three articles.

SUMMARY/GUIDELINES:

Classroom activities:

1. Student/Teacher Conferencing: Teachers can hold brief, focused conferences with students about their writing as it is developing through successive drafts and successive assignments. Initially, the conferences should focus on the student's interests, narrowing the topic, and developing a reasonable writing plan. In later conferences, the teacher can assist the student in improving style and revising for meaning.
2. Peer Evaluation: After specific teacher modeling and laying clear ground rules, students of all ages can become valuable members of the classroom writing community. Peers serve as an audience for the writer. Peers also help the writer make checks for clarity, completeness, and correctness. Numerous methods are available and can be constructed by teachers, but in all cases the peer evaluator must focus on the positive side of a classmate's writing before adding suggestions and asking questions. Also, the sense of authorship must remain with the author, who makes the final decision regarding all changes.
3. Peer Collaboration: Several methods are recommended:
 - a. Simultaneous collaborative composition
 - b. Consecutive collaborative compositions - one student begins a story, and the partner(s) completes it.
 - c. Collaborative sequencing activities - structured as a problem solving activity, learning teams or groups rearrange sentences or paragraphs to improve text.
4. Purposeful Writing: To increase motivation for writing, activities such as newspapers, class books, and class bulletin boards are recommended.

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L29 LIFE SIZE LEARNING GAMES

Source:

Life Size Learning Games. by Connie Dalke, Teaching Exceptional Children, Winter 1984. (Pub: CEC)

Description:

A detailed description of the how-to's for planning constructing and using life-size games is given. These games are highly motivating and employ a total sensory integration approach which is often very successful with learning disabled children.

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L30 LANGUAGE EXPERIENCE APPROACH IN PRIMARY SCIENCE

SOURCE: Barrow, L.H., Kristo, J.V., & Andrew, B. (Nov. 1984). Building bridges between science and reading. The Reading Teacher.

DESCRIPTION: Science activities are a natural way to increase children's background of experiences, and language experience approach--known for its usefulness in beginning reading--is a natural way to increase children's knowledge of experience and print relationships. The two together promote the development of science skills and concepts while stimulating students to ask questions and to respond through speaking, listening, writing, and reading. The procedure is presented.

SUMMARY/GUIDELINES: A method that allows students to develop such skills as classification, observation, inference and prediction, organization and collection of data at the same time as they are learning to speak, listen, write and read about these experiences is the science learning experience (SLE). SLE allows teachers to extend science experiences beyond the textbook. Following is a suggested procedure.

1. Decide upon a unit of study. This can be based on the interests of the students or on the textbook or current curriculum.
2. Gather manipulatives and objects related to the topic.
3. Guide students in their observations of the manipulatives by posing inquiry questions.
4. Have the students write about or dictate their observations about the objects. This may be done individually or in small groups.
5. Have the children illustrate their stories. This may be completed before the writing or speaking exercise as a rehearsal or at the same time.
6. The experience story is then shared with teachers, peers, or parents in the form of discussions, booklets.
7. Expand the experience with extension activities such as reading related literature, participating in related music and art activities, and incorporating other subject area skills such as math and social sciences.

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L31 SPELLING

SOURCE: Project STRETCH. (1980). Spelling. Northbrook, IL: Hubbard Scientific Company.

DESCRIPTION: This teaching activity presents a variety of strategies for teaching spelling to students who have problems learning by conventional methods.

SUMMARY/GUIDELINES:

This teacher training module was developed as part of a series intended to assist regular teachers with mainstreaming handicapped students. Copying of these modules is not permitted. Modules may be purchased for under \$3.00 per copy from:

Hubbard Scientific Company
P.O. Box 104
Northbrook, Illinois 60062

The contents of Spelling:

Identifying Spelling Problems

Activity: Make Up Your Own Alphabet, to experience the frustrations experienced by beginning spellers

Find the Problem . . . And Treat It

Activity: Increasing Visual Memory

Activity: Tying Sounds to Written Forms

Activity: Sounds for the Visual Learner

Activity: Your Own Rules! (to make spelling rules memorable to students have spelling problems)

Activity: Testing Spelling Ability

Activity: Compare Your Kids with the Norm

*** Activity: Getting Specific (causes of typical errors and corrective procedures)

A Spelling Game Is Not Necessarily Spelling

Warning: Spelling bees and other games may be fun for some, but they may not lead to the learning of spelling.

Learning activities are given in these categories:

Activities to train the ears

Activities to train the eyes

Activities to train the memory

Activities for groups, which usually include strengtheners for ears, eyes, and memory.

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L32 DICTATION: AN ADDITIONAL STUDENT TEAM LEARNING TECHNIQUE

SOURCE: Lewis, J. R. (September, 1980). **DICTATION:** An Additional Student Team Learning Technique. Educational Technology, 20 - 23.

DESCRIPTION: 'Dictation' is a cooperative learning technique that gives students a chance to practice and add to their language skills. No special materials are required, and it is easy to implement. Steps are explained.

SUMMARY/GUIDELINES: The procedure for DICTATION is as follows:

1. Create heterogeneous teams that should consist of one able student, two average students, and one weaker student. Seat the team members together.
2. Select a passage to be dictated. You can choose any passage from any source. Choose a passage that illustrates the skill you are working on, such as spelling or punctuation.
3. Dictate the passage to the students in a clear normal voice. Start with short passages and work toward longer ones. You may want to speak at a slower rate of speech in the beginning. Students will write what they hear, paying special attention to correct spelling, punctuation, paragraphing, etc. In the beginning you may only want to correct for one of these aspects working towards building abilities in all aspects of dictation.
4. Allow about 30 minutes for the students to review the passages in their teams and to correct them. This time should be spent trying to make sure that their teammates know the spelling, punctuation, etc. of the paragraph. Students may use reference materials such as usage texts and dictionaries at this time.
5. After time is up, re-read the same passage. Students take the dictation individually, putting their names on their papers. The papers should be handed in and redistributed to students other than those in the same group.
6. Have students score the dictations.
 - a. Supply the students with a correct copy of the passage, either in the form of a handout or on transparency.
 - b. To score, each student starts with 50 points. Give explicit directions for scoring such as counting points off for each word spelled wrong or punctuation marks omitted or misplaced.
 - c. Students correct their peers' papers, putting their names on the papers, and hand them back to the students who wrote them.
 - d. Students should check their passages against the model to be sure that they have been scored correctly.
7. Collect the papers and calculate team scores from the individual scores.
8. Write a class newsletter and/or put up a class bulletin board to recognize the highest scoring teams.

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L33 CLASSROOM READING INCENTIVE PROGRAMS

SOURCE: Ford, M.P., & Ohlhausen, M.M. (1988). Classroom reading incentive programs: Removing the obstacles and hurdles for disabled readers. The Reading Teacher, 796-798.

DESCRIPTION: Many classroom reading incentive programs provide the greatest rewards to the students least in need of incentive, and in fact set up hurdles for poor readers. For example, public displays of the numbers of books read can be embarrassing for poor readers, while individual charts of minutes spent reading can be encouraging for all students. This teaching activity gives 7 guidelines for regular classroom teachers to use in planning incentive programs that benefit poor as well as good readers.

SUMMARY/GUIDELINES:

1. Assess students to know what motivates each one, so that the incentive program is for individuals. Multiple rewards can be planned.
2. Set a goal that is within reach of all students.
3. Allow for a variety of means in attaining the goal. For some students, listening or reading orally may be appropriate.
4. Use equitable units of measures in recording progress toward the goal. As mentioned above, using minutes rather than number of books as the unit of measure is more equitable in many classes.
5. Individualize progress records. This approach allows poor readers to take pride in their own progress without the comparison with the more successful readers.
6. Implement incentive programs that emphasize competition with self rather than with classmates.
7. Implement incentive programs that emphasize group cooperation not group competition. A motivating approach in many classrooms is the paper caterpillar which grows in length as children meet reading goals. Children's cooperative efforts cause the caterpillar to grow, perhaps out the door and down the hall!

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L34 DIAGNOSTIC AND REMEDIAL READING "CLASSROOM DIAGNOSIS"

Source:

Wilson, R. M., & Cleland, C.J. (1985). Diagnostic and remedial reading. Columbus, OH: Charles E. Merrill Company, 93-129.

Source: If Letters Could Fly: Make Every Kid's Wish to be a Good Speller Come True. Instructor, March 1985.

Description:

This teaching option tells the classroom teacher what to look for in various areas when making an informal classroom-based reading diagnosis. These areas are: the learning climate the various causes of reading difficulty the possible instructional adjustments that can be made and the continuous assessment of the student's progress.

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L35 INTEGRATING READING INSTRUCTION IN SCIENCE AND SOCIAL STUDIES

DESCRIPTION:

Content area teachers need their students to learn text material but are often frustrated that their students do not seem to understand what they have read. Many students are poor readers of text material even when they are successful story readers. This training option combines two workbooks -- one from science and one from social studies -- to illustrate how reading process instruction can be embedded in content area materials.

SUMMARY:

The Solar System and United States Presidents (from Media Materials, Baltimore) may be used in intermediate grades and in middle school with students requiring a reduced readability level. Most importantly, though, these workbooks serve as good examples of how to combine reading process instruction with content area material. The Solar System gives students practice with the skills of finding main ideas, reading for details, and getting meaning from context. United States Presidents gives students practice with a study technique for reading content area material. Notes to teachers and to students in United States Presidents are very helpful.

You may order these materials from the publisher, or you may choose to create similar text-based exercises to accompany your own reading assignments. Be sure to teach how, when, and why to use these reading skills when you are using exercises such as these.

How These Workbooks Incorporate Good Reading Process Instruction

They:

1. Teach students to view reading of expository textbooks as "studying", which involves appropriate activities during pre-reading (i.e., previewing), reading, and after reading.
2. Provide practice for each of these stages of text reading.
3. Teach students to use reading aids, such as titles, introductions, summaries, and boldface headings.
4. Teach vocabulary in context.
5. Give students practice with the comprehension skills of finding author's main idea, understanding details, and using context clues.
6. Provide opportunities to write as a means of helping students organize their thoughts about a subject.

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L36 FLUENCY FOR EVERYONE

SOURCE: Rasinski, T.V. (1989). Fluency for everyone: Incorporating fluency instruction in the classroom. The Reading Teacher, 690-693.

DESCRIPTION: This teaching activity recommends a set of principles that can help teachers create fluency activities to meet individual needs in their regular classrooms. Numerous examples are given to help teachers see how to incorporate these principles in their planning.

SUMMARY/GUIDELINES:

1. Repetition. The most effective way of following the principle of repeated readings is to have students meet target words in a variety of texts or by giving them repeated exposures to one text. Rereading in pairs and rereading for the purpose of reading for an audience, such as younger children, are motivating approaches.
2. Model. Since many young students and other less fluent readers may not know what fluency should be, routine modeling is very important. Daily periods should be set aside for teachers and others to read good children's literature aloud.
3. Direct instruction and feedback. Prior to reading aloud, the teacher should remind the class to listen to certain qualities of fluency such as expression, rate, use of pauses. The teacher can also direct students to listen to these qualities when they read. Also, giving students feedback following their reading can help them improve their fluency.
4. Support during reading. The teacher sees that the student receives support -- a critical factor in the development of fluency -- by having the student hear a fluent rendition while reading the passage. Two methods are choral reading, with one or more very fluent readers leading the way, and reading while listening to a tape recording.
5. Text unit. Since fluency involves reading by multiword chunks, or phrases, classroom techniques should assist students in this way. Marking phrase boundaries with penciled slashes helps. The reading of popular songs is also a useful method.
6. Easy materials. Fluency is best promoted when students are reading easy, interesting materials. Decoding must not be a problem when the emphasis is on fluency.

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L37 ADAPTING THE INSTRUCTIONAL ENVIRONMENT FOR MAINSTREAMING

Source:

Wood, J.W. (1984). Adapting instruction for the mainstream.
Columbus, OH: Charles E. Merrill Company, 61-85.

Description:

This teaching option is a text chapter which tells teachers how to adapt their classroom environment to be a better fit for the special needs of handicapped students.

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L38 TEN WAYS TO ENCOURAGE STUDENTS TO SPEAK UP

SOURCE: Peltzman, B.R. (1988). Ten ways to encourage students to speak up. The Reading Teacher, 173.

DESCRIPTION: This teaching activity lists numerous ways teachers can encourage their students to develop verbal skills. Areas that are covered are: discussing, explaining, impromptu speaking, interviewing, broadcasting, reporting, telephoning, storytelling, creative drama, and sharing.

SUMMARY/GUIDELINES:

1. Discussing. Talk about feelings. Give opinions about current events. Solve a problem, such as how to share the responsibilities of the class fish and guinea pigs. Talk about "what if . . . ?" Talk about some of the unanswerable questions.
2. Explaining. Tell and/or demonstrate how to do something, such as make origami swans or make peanut butter cookies.
3. Impromptu speaking. Tell a story as pictured in a wordless cartoon. Discuss humorous figures of speech. Discuss -- without preparation -- the meaning of famous quotes, such as Peter Pan's "I won't grow up." Select a topic for a short, unrehearsed talk.
4. Interviewing. Pretend to introduce a famous person. Do person-on-the-street interviews.
5. Audio/video broadcasting. Make up commercials. Make up news stories that go along with class work. Do a sports cast. Do a talk show using characters and events from class work.
6. Reporting. Research and report on a topic of interest, or on topic that relates to class content.
7. Telephoning. Role play ordering a pizza. Role play taking telephone messages.
8. Storytelling. Tell riddles, jokes, stories on Fridays.
9. Creative drama. Do puppet shows, pantomimes, or theater-in-the-round using original or published material.
10. Sharing. Recite poetry. Read aloud short, favorite stories. Read aloud original stories.

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L39 GRADING ELEMENTARY

Source:

Assigning Report Card Grades to the Mainstreamed Child. by
Sandra B. Cohen. Teaching Exceptional Children, Winter, 1983.
(Pub: CEC)

Source: Evaluating Student Progress in Mainstream Classes. By
Lloyd R. Kinnison, Cheryl Hayes, and James Acord. Teaching
Exceptional Children, Spring 1981. (Pub: CEC)

Description:

Assigning grades is often problematic but particularly when one
or more students is handicapped and mainstreamed into a regular
class. Numerous suggestions are given to help teachers evaluate
students in mainstream classes.

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L40 SPECIFIC ADAPTIVE STRATEGIES

Source:

Techniques and Strategies for Teaching Learning Disabled Students. Pamphlet from University of Maryland, Patterson Building. (No author, no date, public domain)

Source: Specific Adaptive Strategies. (No author or date, public domain)

Description:

Specific adaptations are listed to enhance handicapped students' learning opportunities in math handwriting spelling social studies science language arts and study skills/organization. Alternate grading techniques are also given.

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L41 CLASSROOM MODIFICATIONS BASED ON HANDICAPPING CONDITIONS

Source:

Modifications in Academic Classes. (No author, no date, public domain)

Source: Classroom Modifications Based on Handicapping Conditions. (No author, no date, public domain)

Description:

Numerous modifications are given for each of several handicapping conditions. For example a recommendation for teaching a student with a language fluency problem is to encourage speaking when all is going well and immediately minimize demands to communicate when stuttering becomes more pronounced. Another example for the learning disabled student in math space his/her problems farther apart on the page.

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L42 ASSESSMENT

Source:

Assessment. A "STRETCH" Teacher Education Module, published by:
Hubbard, Hubbard Scientific Company, PO Box 104, Northbrook,
Illinois 60062.

Description:

Having an 'assessment orientation' to teaching usually saves the teacher from teaching content and skills that are already known. This perspective is recommended and a logical progression of activities that should take place is provided.

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L43 FERNALD TECHNIQUE

SOURCE: Tierney, R.J., Readence, J.E., & Dishner, E.K. (1985).
Reading strategies and practices, 2nd ed. Boston:
Allyn and Bacon, Inc.

DESCRIPTION: This multisensory reading technique for students with extreme and partial reading disability is described. Cautionary comments are important; they advise that the procedure is time consuming in the early stages. Having a classroom aide, instructional assistant, or parent volunteer would be very useful.

SUMMARY/GUIDELINES:

Stage One: The student selects word(s) to be learned. To ensure that the student knows meaning of a word, the teacher should always use it in context. The teacher writes word with crayon on strip of paper in large, cursive writing. The student traces the word with finger on paper, pronouncing each part of the word while tracing. Repeat tracing procedure until the student can write word on separate piece of paper without looking at copy. If errors or interruptions occur during tracing or writing from memory, the word should be rewritten entirely. New words are added to alphabetized word bank. (A sample teacher-student dialogue is contained in the complete teaching activity.)

The student may learn 2-4 words with this procedure in the first few lessons. As soon as the student realizes that words are learned this way, story writing is introduced, then words are learned as they are needed. Stage One usually lasts 1-8 months.

2. Stage Two: When the student is learning words without the tracing step, it may be removed. Typically, the teacher will notice that fewer tracings are being required for learning words. During Stage Two the student learns words by looking at them and saying them over and over until they can be written correctly from memory. The words are those that the student needs to learn for story writing. They are presented to the student in either print or cursive. New words are filed, as in Stage One.

3. Stage Three: This stage is identical to Stage Two, except that the student does not need to have the words printed on separate cards for practice. The student sees the new word in print, is told what it is, and pronounces it over and over until it can be written correctly from memory. As in previous stages, new words are added to the word bank for additional practice. The student should be reading a variety of materials.

4. Stage Four: Reading a variety of materials, the student should be able to recognize and figure out new words in context and be told only those words that previous experiences have not prepared him or her for. To enhance retention, the words that are told to the student should be added to the word bank. ⁹⁵

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L44 TEACHING OLDER CHILDREN TO READ

SOURCE: Cunningham, P.M. (1988). When all else fails
The Reading Teacher, 800-804.

DESCRIPTION: This teaching activity presents a program for teaching the older elementary child to read. The program is based on the premise that one learns to read by reading and that the older nonreader needs to learn to read as quickly as possible. Illustrated guidelines are provided.

SUMMARY/GUIDELINES:

1. Find an easy book the child wants to read and tape record it. Start with predictable books, such as Brown Bear, Brown Bear and Ten Apples Up on Top. With older children it may be important to tell them these are good books to start with and they will soon be reading them to kindergartners. Have the student select the book, then record it for the student, reading slowly and with expression. The student should listen to the tape twice a day. After several listenings, the student should start making his or her own tape by reading parts of the book aloud. The student will read the whole book to you when ready and then read it to an audience of kindergartners. Repeat the process.
2. Use the memorized book to begin a sight word bank. Make word cards for all the words on the first 2 or 3 pages; include the page number where the word first appeared. Have the student read the first several pages of the book to you and assist the student in matching the cards with the words on the pages. Provide practice making sentences. Have the student keep the words in a recipe box ("word bank"). Provide daily practice of recognition activities, and continue the routine as the student proceeds with Step 1 above.
3. Use the sight words as the basis of decoding instruction. When the student has 25 or more sight words in the word bank, prepare a folder of key words. Divide the file folder into boxes, one for each letter. Using the word bank, have the student select a key word for the letters, beginning this form of instruction with just two words that start with consonants. Make sure the graphic and auditory qualities of the initial letters are easy to discriminate. Make sure key words are concrete and high interest. Write the key words in the letter boxes. Continue this form of practice with elaborations, such as practice with rhyming words, to help develop decoding skills.
4. Include the nonreader in a reading group. With the student in a group, he or she will feel less isolated than if in no group at all, but it is important to minimize chances of embarrassment. Round robin reading is usually not a good practice for this student and the other students in the lowest group. A good practice is to conduct silent reading that is structured so that students read page by page to discover the answer to a purpose-setting question given by the teacher.

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L45 READING IN THE CONTENT AREAS

Source:

Reading in the Content Area. Published by Hubbard. P.O. Box
104, Northbrook, Illinois 60062.

Description:

The purpose of this teaching option is to assist teachers in development of strategies to improve reading in the content areas. Basic principles of improving students' opportunities to learn are presented and illustrated with some applications of the principles. The content is appropriate for teachers of all levels and subject areas regardless of handicap.

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L46 PEER TUTORING MATH FACTS

Source:

Drilling Basic Math Facts: From Drudgery to Delight. by Deborah F. Alexander. Teaching Exceptional Children, Spring 1986. Pages 209-212. (Pub: CEC)

Description:

Peer tutoring is often an efficient and effective means of individualizing instruction. This variation is described as a way of drilling basic math facts.

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L47 ALL CHILDREN CAN WRITE

Source:

All Children Can Write. by Donald H. Graves. Learning Disabilities Focus, 1(1), 1985, pages 36-43.

Description:

The writing-process approach is described and stressed as a highly effective way of improving the writing of learning disabled students.

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L48 WORD ATTACK INTERVENTIONS

SOURCE: Haynes, J.A., Dreifuss, S., & Adger, C.T. (1987).
Reading readiness: Problems and solutions.
Unpublished manuscript. Institute for the Study of
Exceptional Children and Youth, University of Maryland,
College Park.

DESCRIPTION: This training activity briefly defines word attack,
then it lists and describes numerous teaching approaches.

SUMMARY/GUIDELINES:

This teaching activity briefly describes these techniques:

- Language Experience Approach
- Linguistic Approach
- Discovery Technique
- Signing
- Focus on Word Families
- Cloze
- Direct Syllabication Instruction
- Choral Reading
- Emphasis on Context
- Repair Strategies
- Schoolwide Word Attack Strategies
- Programmed Materials
- Games
- Learning Centers
- Adjustment of Difficulty Level
- Use of Dictionaries
- Text Driven Approaches
- Use of Linguistic Readers
- Emphasis on Segmenting and Blending
- Analytic Method
- Chunking
- Combining Phonic Analysis with Context Clues
- VAKT
- Neurological Impress Method

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L49 PREDICTABLE BOOKS

SOURCE: McClure, A.A. (1985). Predictable books. Teaching Exceptional Children, 267-273.

DESCRIPTION: Children's literature that is written in a predictable style is an important resource for teaching young readers, particularly those who are having some difficulty with traditional reading approaches. Discussion of a Predictable Books approach is included with a helpful list of children's books.

SUMMARY/GUIDELINES:

What to read: Use real literature, such as Brown Bear, Brown Bear, What Did You See?, The Very Hungry Caterpillar, and The Gingerbread Boy. The most appropriate literature uses languages and experiences that are familiar and fun for children. See the list at the end of the complete teaching activity.

What to do:

1. Use a "big book" version of the story. Some publishing companies, such as Holt, Rinehart, and Winston, are now preparing big books for the teacher to use. If necessary, the teacher can prepare his or her own enlarged texts. One approach is to write the text on large paper and have the students draw the pictures.
2. The teacher reads the story aloud to the group, holding the book so all can see. The children are encouraged to read along as soon as they feel able. The teacher then reads the book aloud again, encouraging the children to take the lead. The teacher points to the words and sentences as they are read, pointing out the match between pictures, oral language, and printed text. Further practice is provided by giving individual copies to students or partner teams for independent reading.

After the students have had sufficient time to look closely at the whole text, they are ready, as an instructional group, for a closer look at individual words, phrases, and phonetic elements. They are asked to match word and phrase cards to words and phrases in the story. Instruction can easily focus on these small parts of the whole story without moving too far away from the context.

After group instruction, students should be ready for independent activities that give them further practice with sight vocabulary skills, knowledge of phonetic and word structure elements, use of context, and comprehension. Skills are taught and practiced as they are needed. For students with IEP's, instruction can be made to match their IEP objectives.

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L50 THE STORY FRAME APPROACH

SOURCE: Fowler, G., & Davis, M. (Summer 1985). The Story Frame Approach. Teaaching Exceptioanl Children.

DESCRIPTION: Story frames are patterns that help readers organize the information they read, thereby enhancing their comprehension. Though the article targets mildly retarded students as benefitting from this approach, it may be recommended for all studetns who are having comprehension difficulties. Sample story frames are provided.

SUMMARY/GUIDELINES:

1. Establish baseline performance by having children respond orally to the following set of general questions, after silently reading a series of passages.
 - a. Can you tell me the most important problem in the story?
 - b. Can you tell me one thing that somebody did?
 - c. Can you name a second thing that somebody did at another time in the story?
 - d. In the first question you said that the important problem was.... How was that problem solved?
 - e. What was the last thing that happened in the story?
2. Teach the students to use the story frame approach:
 - a. Display a sample story frame set up with the prompts "The problem in this story was", "It started when", "After that", "Then", "The problem is solved when", "The story ends". This should be displayed on a laminated chart.
 - b. Recall a story that is known to the students.
 - c. Ask the students what information about the story could make sense in the frame.
 - d. Continually ask the students to revise previous statements so the frame would still make sense when the completed lines are read together.
 - e. Emphasize that you are not looking for one correct answer, but only that the entire frame makes sense.
 - f. Encourage students to try different bits of information at the beginning of the frame and see where it leads them as they go through the story frame.

This approach has been shown to improve comprehension and recall abilities of the students.

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L51 WRITING AS A TOOL TO IMPROVE CONTENT AREA READING

SOURCE:

Beutler, S.A. (1988). Using writing to learn about astronomy.

The Reading Teacher, 412-417.

Raphael, T.E., Kirschner, B.W., & Englert, C.S. (1988).

Expository Writing Program: Making connections between reading and writing. The Reading Teacher, 790-795.

DESCRIPTION: This teaching activity presents two methods of using writing to improve students' reading comprehension in content areas. In both methods emphasis is on careful reading followed by careful writing. In the process students learn to see the reading-writing connection and move away from viewing subject matter reading as a teacher-directed exercise.

SUMMARY/GUIDELINES:

Beutler's Approach: This approach involves having students prepare various forms of written work for public display in the school -- in this case, an Astronomy Fair. To have students ready for the display phase, the teacher provides numerous prewriting activities, such as films, filmstrips, text chapters, discussions, and observations, which give the students the content of their work. Notetaking is encouraged. Next students, working independently or in pairs, write sets of questions on the material. In response groups they try out and refine their questions. Next, they select library books on the topic and prepare 15 sentences about the topic, which they also test in their response groups. Another assignment is to develop a question based on their library books that calls for an explanatory answer. They also must write an answer to their question. All of the written materials they compose must be shared, edited, refined, and eventually displayed in the "Fair".

Raphael et al.'s Approach: This approach includes the use of teacher-made "Think Sheets" that stimulate students to use strategies for planning, gathering information, drafting, editing, and revising. Think Sheets, serving as writing prompts for the production of expository writing, help focus students' attention on the main idea, points to be included, how to make the paper interesting, the audience, sequencing. As a self-monitoring tool, Think Sheets remind students to self-check their work. Separate Think Sheets for major text structures help students recognize and work with different types of structures. Different Think Sheet forms help direct students' work at all phases -- pre-writing, organizing, drafting, editing, peer editing, revising. This tool is recommended for its good fit with the writing process approach, with its emphasis on peer involvement. It is important to view the Think Sheet and the teacher's instructional support as two means of helping students recognize and understand text structure elements in written text. Students must then produce text in these forms, increasing their knowledge of deep structure of text.

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L52 QUESTIONING SKILLS

Source:

Questioning Skills. Handbook published by Hubbard. P.O. Box 104,
Northbrook, Illinois, 60062.

Description:

This teaching activity has the purpose of assisting teachers in developing awareness of the structure of questions which require students to use ideas rather than simply recall facts. This activity helps promote student involvement.

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L53 STRATEGIES TO EXTEND STUDENT THINKING

Source:

Strategies to Extend Student Thinking. (Single Page Handout; no author, no date; public domain)

Description:

Numerous strategies are presented which help extend student thinking. These techniques are good for heterogeneously organized classes of various subjects and grade levels.

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L54 READING DIFFICULTIES: ADAPTING INSTRUCTION

Source:

Chapter 13. Bond, G.L., Tinker, M.A., Wasson, B.B. & Wasson J. B. Reading Difficulties. 1979. Engelwood Cliffs, N.J.: Prentice-Hall, Inc., 243-264.

Description:

Some handicapped students have their disability complicated by the inability to read successfully. This teaching option discusses the special modifications needed for students such as this. Discussion of adaptations for reading difficulties are associated with specific handicapping conditions such as hearing impairment and emotional disturbance.

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L55 READING DIFFICULTIES: CORRECTING WORD RECOGNITION
DEFICIENCIES

Source:

Chapter 10. Bond, G.L., Tinker, M.A., Wasson B.B. & Wasson J.B.
(1979). Reading Difficulties: Their diagnosis and Correction.
Engelwood Cliffs, N.J. Prentice-Hall Inc., 173-194.

Description:

Skill in word recognition is a fundamental part of proficient
reading at any level. This chapter identifies the major
deficiencies and provides examples of exercises teachers can use
to remediate these problems.

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L56 READING DIFFICULTIES CORRECTING DECODING SKILL DEFICIENCIES

Source:

Chapter 11. Bond, G.L., Tinker, M.A., Wasson, B.B. & Wasson, J.B. 1979. Reading Difficulties: Their diagnosis and correction. Engelwood Cliffs, N.J. Prentice-Hall Inc., 195-223.

Description:

The basic problems of faulty word-study skills are discussed and sample exercises for remediating deficiencies are presented.

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L57 READING DIFFICULTIES LEFT RIGHT DIRECTIONALITY

Source:

Correcting Reversals. part of the chapter on Treating the Extremely Disabled Reader in: Bond, G.I. Tinker, M.A., Wasson, B.B. & Wasson J.B. (1979) Reading Difficulties. Engelwood Cliffs, New Jersey: Prentice-Hall, Inc., 232-241.

Description:

Reversals are common among young children and are only indications of learning problems when they persist and when they interfere with normal reading development. When necessary for promoting normal reading development teachers must remediate poor skills. This teaching option presents remediation procedures.

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L58 TACTICS FOR TEACHING ARITHMETIC

Source:

Chapter 2. Lovitt, Thomas C. (1984). Tactics for teaching.
Columbus, Ohio: Charles E. Merrill Publishing Company, 160-194.

Description:

Specific strategies for teaching basic computational skills are presented. Some strategies focus on skill placement and on setting goals some focus on adjustments teachers can make to improve students' opportunities to succeed and some focus on ways teachers can help students attend to the arithmetic task at hand.

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L59 COOPERATIVE LEARNING AND COMPUTERS IN MATH CLASSROOMS

Source:

Cooperative Learning and Computers in Math Classrooms. From:
Male, M., Johnson, D., & Johnson, R. (1986). Cooperative
learning and computers. An activity guide for teachers. Los
Gatos, CA: Educational Apple-cations.

Description:

This teaching option presents the essential ingredients of
cooperative computer lessons in math classes. Included are (1)
principles of cooperative learning and software selection and (2)
samples of lessons.

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L60 MANAGING SPECIAL GROUPS IN ELEMENTARY SCHOOLS

Source:

Evertson, C.M. Emmer, E.T., Clements, B.S. Sanford, J.P., &
Worsham, M.E. (1984). Classroom Management for Elementary
Teachers. Engelwood Cliffs, NJ: Prentice Hall, Inc., 129-146.

Description:

Information and suggestions are given for successfully managing
heterogeneous classes and low-ability classes. Topics include:
assessing entering achievement identifying special groups
strategies for individual differences and teaching low achieving
students.

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L61 MANAGING SPECIAL GROUPS IN SECONDARY

Source:

Managing Special Groups in Secondary School. Emmer, E.T. ,
Evertson, C.M., Sanford, J.P., Clements, B.S. & Worsham, M.E.
(1984). Classroom management for Secondary Teachers. Engelwood
Cliffs, NJ: Prentice-Hall, Inc., 127-145.

Description:

Information and suggestions are given for successfully managing
heterogeneous and low achieving classes. Topics include:
assessment modifying instruction small group instruction
learner characteristics and classroom management.

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L62 TEACHING WRITING LEARNING DISABLED ADOLESCENTS

Source:

Teaching the Learning Disabled Adolescent: Strategies and Methods. by Gordon Alley and Donald Deshler. 1979. Denver: Love Publishing Company.

Source:

Individualized Language Arts. Weehawken Board of Education. Weehawken, N.J. 07087. Washington, D.C.: National Diffusion Network, 71-89.

Description:

Methods of teaching LD adolescents with written expression deficits are presented. Attention is given to students' attitudes toward their writing and to the components of a writing program that will improve their abilities.

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L63 ASSESSING MATHEMATICS SKILLS IN LD ADOLESCENTS

Source:

Teaching the Learning Disabled Adolescents; Strategies and Methods. by Gordon ALley and Donald Deshler. 1979. Denver: Love Publishing Company.

Description:

Methods of assessment are presented. In the area of informal assessment a major point is that task analysis allows teachers to recognize numerous implicit steps involved in what appears to be a simple operation.

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L64 TEACHING MATHEMATICS TO LEARNING DISABLED ADOLESCENTS

Source:

Teaching the Learning Disabled Adolescent: Strategies and
Methods. Chapter 5. by Gordon ALley and Donald Deshler.
Denver: Love Publishing Company.

Description:

Information is presented on the concepts of mathematics the
competencies required by students and the specific deficiencies
of LD students. Also presented are a number of strategies to
enhance LD students' math skills.

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L65 TEACHING MATHEMATICS TO LEARNING DISABLED ADOLESCENTS

Source:

Chapter 8. Listening Strategies and Methods. Teaching the Learning Disabled Adolescent: Strategies and Methods. by Gordon Alley and Donald Deshler. Denver: Love Publishing Company.

Description:

A concern is that in language arts listening is given the least attention. However it is often a major problem area for LD students. Listening is defined and explained in terms of its difficulties for LD students. Suggestions are given for helping LD adolescents improve their skills.

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L66 TEACHING SPEAKING STRATEGIES TO LD ADOLESCENTS

Source:

Speaking: Strategies and Methods. Chapter 9. Teaching the Learning Disabled Adolescent: Strategies and Methods. by Gordon Alley and Donald Deshler. Denver: Love Publishing Company, 1979.

Description:

The continued development of oral language skills is important for both social and academic achievement as adolescents progress through school. Oral language problems are presented with suggestions for improving students' skills.

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L67 TEACHING VOCABULARY TO LD ADOLESCENTS

Source:

Teaching Vocabulary to Learning Disabled Adolescents. Teaching the Learning Disabled Adolescent: Strategies and Methods. by Gordon Alley and Donald Deshler. Denver: Love Publishing Company, 1979.

Description:

The importance of building vocabulary is stressed and methods of improving student skill are provided.

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L68 INCREASING LD ADOLESCENT READING COMPREHENSION

Source:

Increasing Reading Comprehension. Teaching the Learning Disabled Adolescent: Strategies and Methods. by Gordon Alley and Donald Deshler. Denver: Love Publishing Company, 1979.

Description:

The importance of improving reading comprehension is stressed. Suggestions for teaching are in the following areas: recognizing topic sentences recognizing organizational patterns improving visual imagery using questioning strategies.

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L69 DEVELOPING LD ADOLESCENT READING FLEXIBILITY

Source:

Developing Learning Disabled Adolescents Reading Flexibility.

Teaching the Learning Disabled Adolescent: Strategies and Methods by Gordon Alley and Donald Deshler. Denver: Love Publishing Company, 1979.

Description:

Students must vary their reading rate according to the difficulty level of the material and their purpose for reading the passage. Suggestions are given for teaching students how to develop flexibility.

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L70 HELPING LD ADOLESCENTS DEVELOP STUDY SKILLS

Source:

Promoting Study Skills. Teaching the Learning Disabled
Adolescent: Strategies and Methods. by Gordon Alley and Donald
Deshler. Denver: Love Publishing Company, 1979.

Description:

The LD adolescent will usually require direct instruction in study skills understanding of the relationship between these skills and academic achievement and continued practice using these skills. Skills presented are locational study skills general organizational skills organizing reading survey skills and long-term storage and information retrieval.

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L71 REMEMBERING

SOURCE: Remembering. (ND). Unpublished manuscript, Lawrence, Kansas, Child Service Demonstration Center.

DESCRIPTION: The purpose this teaching activity is to provide teachers with a method of teaching the memorization process.

SUMMARY/GUIDELINES:

Instructional Objectives:

1. The student will be able to list reasons for remembering specific information.
2. The student will be able to summarize the information assigned or identify important elements in the material.
3. The student will be able to estimate the time required for the memorization task.
4. The student will be able to select and use an appropriate memorization strategy.
5. Using an individually selected memorization strategy, the student will be able to use feedback to self-correct.
6. Following the use of rehearsal strategies, the student will be able to recall information after a period of two days.

Steps:

1. Developing Interest. Classroom activities should lead to the student's being able to demonstrate awareness of reasons for remembering certain information. The reasons will tie in with interest/motivation.
2. Generating Understanding. Classroom activities should prepare the student for demonstrating an understanding the meaning of content to be remembered.
3. Estimating Effort. Classroom practice with the process of predicting the amount of time and effort required is an important component of this study skill.
4. Using a Strategy. Since different kinds of materials require different remembering strategies, classroom practice should help the student learn to select appropriate strategies.
5. Using Feedback. To monitor efficiency and accuracy, the student needs to receive evaluative and corrective information. Feedback in the classroom helps the student judge the correctness of information learned through memorization strategies.
6. Repeating New Information. Classroom practice helps the student learn to use various rehearsal strategies to make newly remembered information available and fresh after a couple of days.

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L72 TEXTBOOK USAGE

SOURCE: Textbook Usage. (ND). Unpublished manuscript, Lawrence, Kansas, Child Service Demonstration Center.

DESCRIPTION: The purpose of this teaching activity is to provide teachers with a method of helping students become more skilled at using their textbooks.

SUMMARY/GUIDELINES:

Good readers often pick up textbook usage skills without being taught, but poor readers often do not. The instructional sequence presented here covers these skills:

1. Identifying and locating the parts of the textbook.
2. Using parts of a textbook to locate information.
3. Using textbook usage skills to complete appropriate tasks.

Numerous classroom activities in this teaching activity give students the practice necessary for learning each of these skills.

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L73 VISUAL AIDS

SOURCE: Visual Aids. (ND). Unpublished manuscript, Lawrence, Kansas, Child Service Demonstration Center.

DESCRIPTION: The purpose of this teaching activity is to provide teachers with a method of helping students use the various types of visual aids in textbooks.

SUMMARY/GUIDELINES:

When students' reading abilities are poor, they often rely upon visually presented information. Practice with the activities of this teaching activity should help students sharpen their abilities to use visual aids.

The skills covered fall into these three categories:

1. Determining the type of information presented.
2. Locating specific information in the major types of visual displays.
3. Using information from visual aids to answer questions.

Instructional Objectives:

1. Given a visual aid, the student will determine what type of information is presented.
2. Given the legend of a visual aid, the student will define all terms and locate examples in the visual aid.
3. Given a visual aid employing horizontal and vertical scales, the student will locate them and state their purpose.
4. Given a map, the student will use lines of longitude and latitude to locate specific cities, towns, or geographical features.
5. Given a table, the student will scan the table to locate specific information.
6. Given a diagram, the student will read the diagram and give a verbal explanation of its contents.
7. Given a graph and a question to answer, the student will locate the information needed to answer the question.
8. Given a map and a question to answer, the student will locate the information needed to answer the question.

Classroom activities given in the complete teaching activity provide students with the practice they need to learn to meet these objectives.

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L74 SKIMMING AND SCANNING

Source:

Handout entitled Skimming. (15 pages, no name, no date; public domain).no name, no date; public domain).

Description:

For students who read slowly a means of helping them attain greater speed without sacrificing comprehension is important. Skimming and scanning are necessary study skills for these students. In this teaching option these skills are presented in a series of logical steps.

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L75 TEST SKILLS

Source:

Test Skills handout. (18 pages, no name, no date; public domain).

Description:

Learning disabled and low achieving adolescents live in a world of academic uncertainties. They habitually encounter difficulties in testing situations. They will benefit from the systematic instruction in test-taking skills presented here.

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L76 AFTER YOUR STUDENTS WRITE

Source:

After Your Students Write: What's Next? by Gail E. Tompkins and Marilyn Friend. Teaching Exceptional Children. Spring, 1988. pages 4-9. (Pub: CEC)

Description:

A shift in the teaching of writing is occurring which benefits disabled students--a shift from a final product orientation to writing as a process. This teaching option explores the refining and polishing or final stages of writing focusing on the benefits to disabled students.

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L77 TEACHING TIME USING THE WHOLE CLOCK METHOD

Source:

Teaching Time Using the Whole Clock Method. by Betty Lee
Lipstreu and Marilyn Kay Johnson. Teaching Exceptional Children.
Spring 1988. pg. 10-12. (Pub: CEC)

Description:

When students are having trouble learning to tell time the whole
clock method is often recommended. The technique is presented.

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L78 IT IS ABOUT TIME

Source:

It's About Time. by Rick Krustchinsky and Nancy Lerner.
Teaching Exceptional Children. pg. 40 - 41. (Pub: CEC)

Description:

This strategy for teaching young children to tell time focuses on readiness activities and on breaking the task into components which are practiced to mastery.

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L79 EVERY MINUTE COUNTS AND ITS SEQUEL

Source:

Every Minute Counts: Making Your Math Class Work. by David R. Johnson. Dale Seymour Publications, mathematics. P.O. Box 10888, Palo Alto, California 94303.

Source:

Making Minutes Count Even More: A Sequel to Every Minute Counts. by David R. Johnson. Dale Seymour Publications, mathematics. P.O. Box 10888, Palo Alto, California 94303.

Description:

These two booklets have been highly recommended by math teachers for their practical advice pertaining to classroom management techniques, questioning approaches, communication between teachers and students, successful lessons, working with parents, etc.

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L80 Motivate Reluctant Learning Disabled Writers

SOURCE: Whitt, J., Paul, P. and Reynolds, C. (Spring 1988).
Motivate Reluctant Learning Disabled Writers. Teaching
Exceptional Children, 37-39.

DESCRIPTION: The writing process approach is recommended with each step explained. The focus is on the benefit to disabled students.

SUMMARY/GUIDELINES: The classroom should be set up in stations, each representing a different stage of the writing process. Each station should have a work table and set of questions or prompts to help guide the students through the stage and selected stations should have a word processor for student use.

o Prewriting: Students choose a topic, generate ideas, identify their audience and devise a tentative organizational plan. Topics are chosen. The purpose of their writing is given and a semantic map or outline should be devised. This is then shared with other students for further ideas. A lead sentence is produced to convey the essence of the composition.

o Drafting: Students are told to keep their pencils moving while using the map or outline to guide their ideas. Mechanical aspects of the writing are not emphasized. Teachers help to guide the students in their writing by encouraging and praising while avoiding criticism. Each student keeps a folder for a record of their progress through the writing process, their drafts and revisions.

o Peer Conference: Pairs of students gain feedback by sharing their drafts with another student. They look critically at writing by using guide questions such as "Do you describe events by giving concrete details?" and "Are your paragraphs in proper sequence?". These are posted at the station.

o Revision: The student reviews his writing and uses his knowledge and the suggestions of his peers to make revisions. They polish, alter, expand, and clarify. The teacher models revision by helping the students to make appropriate changes.

o Editing: Mechanical errors are addressed and corrected with the help of a peer partner. This station should contain a list of editing symbols and other tools for correcting these types of errors.

o Teacher conference: This is a more formal opportunity for the teacher and student to interact. Students read their writing and review difficulties they encountered. The teacher reviews any corrections that need to be made and offers encouragement. Advanced skills may be taught at this stage.

o Publishing: Students produce their final work in a neat, legible copy. The works are presented orally and in print. Students can take pride in having their finished product presented to a wider audience.

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L81 Study Skills

SOURCE: Special Focus (3 articles): Gleason, M., Teaching Study Strategies; Herr, C., Strategies for Gaining Information; and Archer, A., Strategies for Responding to Information (Spring 1988). Teaching Exceptional Children, 52-57.

DESCRIPTION: Critically important in the teaching of learning disabled students is the teaching of study skills. This importance is stressed as a means of helping them take a more active part in their learning, and specific strategies are given.

SUMMARY/GUIDELINES: To teach a new strategy:

- 1) Discuss its importance, encourage active participation and demonstrate each step in the strategy.
- 2) Guide the students through the use of the strategy, providing opportunities to practice with novel situations. Emphasize that the strategy and how it is used are the same although the situation is different.
- 3) Help students become independent in the strategies used by using verbal rehearsal and self management skills.
- 4) Have the students practice the strategy in new situations.

Strategies used to gain specific information are:

- 1) Advance organizers: tell or cue the students that the information being presented is important. Use words such as first, second, etc., give an outline for notes, or provide prompts.

- 2) Paraphrasing and self-questioning summarization strategies: Have the students read a paragraph and locate the main idea and details by asking questions. Require the students to interact with the study materials by answering the questions in their own words.

- 3) Enhancement of listening skills: In order for the students to be able to attend to, comprehend, and retain information presented orally, give clear, direct instructions to attend, use visual aids such as outlines, increase the proximity of the speaker to the listener and use different voice patterns.

Organization, appearance, completion and accuracy:

- 1) Organization is necessary so that students can store, retrieve and transport materials. A three ring notebook with pencil pouch, pocket dividers for each class and notebook paper is suggested for the older student and two labelled folders, one to use in class and one to take home is appropriate for younger students. Basic time management should be taught by instructing students on the use of a monthly assignment calendar.

- 2) Appearance: Teach students the attributes of an attractive paper using HOW. Heading, Organized including margins and spacing, and Written neatly. Use positive and negative consequences as reinforcers.

- 3) Completion and Accuracy: Teach students to be strategic using a Plan-It, Complete-It, Check-It sequence, with Plan-It as a very important step involving careful reading of directions. "COPS" is a strategy for boosting accuracy; the student checks: Capitalization, Overall appearance, Punctuation, Spelling.

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L82 INDIVIDUALIZING MATHEMATICS INSTRUCTION

Source:

Cawley, J.F. (1985). Secondary school mathematics for the learning disabled. Rockville, MD: Aspen, 61-81.

Description:

The focus of this teaching option is to help secondary math teachers resolve the dilemma of how to adapt instruction for handicapped students while continuing to meet the needs of the other students in the classroom. A number of techniques are discussed and the steps involved in individualizing instruction are given.

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L83 MAINSTREAMING AND COOPERATIVE LEARNING STRATEGIES

Source:

Mainstreaming and Cooperative Learning Strategies. by D.W. Johnson and R. Johnson. (1986). Exceptional Children, Vol 52, No. 6, pp. 553-561. (Pub: The Council for Exceptional Children.)

Description:

Using cooperative learning strategies to structure student-student interaction has the potential of achieving the social integration goal of the mainstreaming law. Values and principles of cooperative learning are presented with a step-by-step procedure. Attention is given to the needs of handicapped students who are being mainstreamed.

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L84 USING THE DRA TO TEACH LITERARY COMPREHENSION

Source:

Using the DRA to teach literary comprehension at three response levels. Journal of Reading, Feb. 1985. Dan Donlan.
(Pub: IRA)

Description:

This strategy builds on the familiar Directed Reading Activity and helps teachers respond to the varying needs in their heterogeneously organized English classes. Three lessons are included to show how a teacher can focus on personal structural/formal interpretive/critical response levels in the same class.

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L85 Graphic Organizers

SOURCE: Graphic Organizers. McTighe, J. (ND). MSDE, Division of Instruction/Language and Learning Improvement Branch.
(Public domain)

DESCRIPTION: Graphic organizers provide visual, holistic representation of facts and concepts and their relationships, and have proven effective as tools for thinking and learning. Numerous models are presented with a general teaching procedure for teaching their use in classrooms.

SUMMARY/GUIDELINES:

Some examples of graphic organizers are the web, venn diagram, sequence chains, main idea table, story map, character analysis chart, comparison table, decision making chart among others.

Steps:

I: Describe the concept of graphic organizers, their importance and benefits.

II: Introduce a specific graphic organizer and describe its purpose and form.

III. Explain and demonstrate the use of the organizers with familiar information and then with new information.

IV: Let the students apply the graphic organizer for a specified purpose to familiar material and then to new, relatively easy material.

V: Have students reflect on the use of the graphic organizer by sharing examples and evaluating the effectiveness of the organizer in relation to the stated purpose.

VI: Provide multiple opportunities for students to practice using the graphic organizer.

VIII: Encourage students to construct their own organizers.

*** Integrate graphic organizers into the classroom routines and into class assignments.

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L86 VOCABULARY GAME

SOURCE: Zastrow, H. (1988). Word play for 3rd to 7th grade readers. The Reading Teacher, 495.

DESCRIPTION: This teaching activity gives the steps of a game involving teams which helps students increase their vocabulary and develop strategies for dealing with unfamiliar words while reading.

SUMMARY/GUIDELINES:

An exciting way to wake students up to the challenge of learning new words:

1. Tell students they will read a selection with some unfamiliar words. They will write words they don't recognize and page numbers on index cards and keep reading.

2. After reading the selection, place 3 students on a panel. They collect all the index cards and select 9 words, preferably words that will be unknown to most of the class.

3. Each panel member takes 3 words and uses any source available, without asking the teacher, to figure out the meanings. Next the 3 panel members meet with each other to discuss their meanings and create "off the wall" definitions of the words.

4. The panel comes to the front of the class, and the remainder of the class is divided into three teams. The 9 words are listed on a chart. One member of a team selects a word and asks the panel members for a definition. Only one panel member gives the correct definition.

5. After the contestant has heard all three definitions, he or she consults with his or her team to choose the correct definition.

6. The teams take turns, and the one with the most correctly identified definitions wins.

****Combining the game with a discussion of how to figure out new words helps to heighten students' awareness of strategies for dealing with new vocabulary.****

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L87 IMPROVING COMPREHENSION

Source:

Anticipating Ideas. Bruce W. Brigham, Jean McDevitt, Patrice Wilson. The Reading Center, College of Education, University of Maryland (Public Domain).

Description:

Teaching for the anticipation of ideas and the appreciation of characterization are two components of successful literature instruction. Teaching procedures and practice exercises are given for both.

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L88 SELF CORRECTION FOR IMPROVING WRITING SKILLS

Source:

Self-Correction: A Positive Method for Improving Writing Skills.
Linda R. Hayward, James R. LeBuffe. Teaching Exceptional
Children, Fall 1985, (Pub: The Council for Exceptional
Children.)

Description:

The self-correction code is a system of markers for various grammatical errors often found in students' work. When teachers mark margins with coded errors, students have a tool for correcting their writing. Though the system described here was tested with deaf students, it is successful with other handicapped and nonhandicapped students.

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L89 TIPS FOR BEING BETTER ORGANIZED FOR SCHOOL

Source:

Bragstad, B.J., & Stumpf, S.M. (1987). A guidebook for teaching study skills and motivation, 2nd ed. Newton, MA: Allyn & Bacon, Inc.

Description:

This teaching activity is a three page handout which contains suggestions on time management and on being better prepared for school. Suggestions are aimed at students and parents.

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L90 INCREASING CRITICAL READING IN JUNIOR HIGH CLASSROOMS

Source:

Increasing Critical Reading in Junior High Classrooms, Bonnie Ericson, Mary Hubler, Thomas W. Bean, Christine C. Smith, Joanna Vellone McKenzie. Journal of Reading, February, 1987.
(Pub: IRA)

Description:

Three content area reading strategies are presented which are useful in English and social studies classes:
anticipation-reaction guides text previews and 3-level study guides. These strategies incorporate the principles of small group cooperative learning while emphasizing higher order critical thinking.

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L91 LOW STRESS ALGORITHMS

Source:

Low Stress Algorithms, Dr. Hutchings, Division of Instruction,
Maryland State Department of Education and University of
Maryland, June 1976.

Description:

This approach was developed as a way to help students with remedial needs compute rapidly and accurately. Students using this technique demonstrate confidence they did not feel when using traditional methods. Success in research and practice has been claimed for the use of this approach with many students for whom conventional methods have not succeeded.

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L92 GROUPING AND SPECIAL STUDENTS

Source:

Grouping and Special Students and Special Students. (A "STRETCH" Teacher Education Module). Ellouise Collins, Lawrence R. Weiner. Hubbard Publishing. Metropolitan Cooperative Educational Service Agency, 1977.

Description:

The purpose of this teaching option is to help teachers see that various teaching objectives may be met by altering conventional organizational patterns. Teachers are encouraged to be innovative with their student grouping. Different types of groups and their functions are presented.

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L93 CLOZING IN ON COMPREHENSION: THE CLOZE STORY MAP

Source:

Clozing in on Comprehension: The Cloze Story Map. D. Ray
Reutzel. The Reading Teacher. (Pub: IRA)

Description:

Strengths of semantic mapping or webbing are combined with the strengths of the cloze procedure as a means of improving students' reading comprehension. The basic plan for making a Cloze Story Map either for a narrative or expository form is given.

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L94 GRADING SECONDARY

Source:

Evaluating Student Progress in Mainstream Classes, Lloyd R. Kinnison, Cheryl Hayes, James Acord. Teaching Exceptional Children, Spring, 1981, 97-99. (Pub: The Council for Exceptional Children.)

Source:

ABCDEF Effective Grading (No name, no date, public domain).

Description:

Traditional grading poses significant problems for teachers working with secondary learning disabled students. Alternative grading methods are suggested along with awareness materials.

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L95 CLASSROOM ACCOMMODATIONS FOR MAINSTREAMING

Source:

Promoting Successful Mainstreaming: Reasonable Classroom Accommodations for Learning Disabled Students. Stanley A. Fagen, Donald L. Graves, Diane Tessier-Switlick. Office of Special and Alternative Education, Montgomery County Public Schools, Rockville, MD. (No date, public domain)

Description:

Several pages are presented from a Montgomery County Public Schools handbook for successful mainstreaming of learning disabled students. Included are lists of classroom behaviors that often accompany specific handicaps. Also included is a checklist of reasonable classroom accommodations that have proven successful with learning disabled students.

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L96 HELPING STUDENTS DEVELOP THEIR METACOGNITIVE SKILLS

Source:

Mediating the Meta-Cognitive, Arthur L. Costa, California State University, Sacramento. (No date; copied from MSDE collection of articles on critical thinking)

Description:

Metacognition is our ability to know what we know and what we don't know and to know when we are attending to learning and when we are not. Many students including the learning disabled benefit from metacognitive training. A dozen suggestions are given for teachers of all grades and subjects to enhance their students' metacognitive skills.

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L97 STRUCTURING CLASSROOMS FOR THINKING SKILLS

Source:

Thirty-Four Years Later; Barbara Hoffmann, The Early Adolescence Magazine, March 1987, Volume 1, Number 4.

Source:

Lyman, F.L. (1986). Think-Pair-Share: A multi-mode discussion technique. Howard County Public Schools.

Description:

This teaching option describes an exciting classroom where students are engaged in critical thinking and it presents 'Think-Pair-Share: A Multi-Mode Discussion Technique' and 'Think Trix' two strategies that are highly recommended for active thinking classrooms.

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L98 SHOW AND TELL, READ AND WRITE

SOURCE: Britt, B.M. (1988). Show & Tell write & read. The Reading Teacher, 487.

DESCRIPTION: Many primary classrooms use a sharing time which can be linked very directly to print by adding components of the language experience approach. This teaching activity lists materials and steps of the technique. The purpose is to relate print to students' lives and interests.

SUMMARY/GUIDELINES:

1. Student shares an experience, discovery, or treasure.
2. Teacher writes a sentence or two that summarize the topic. Or the teacher has the student dictate. Text is written with magic marker on large paper.
3. Read the text as a group. See that the student who shared has extra time, if necessary, to become independent with the text.
4. Use this text to discuss appropriate aspects of print, such as children's names, high interest words, and beginning letters.
5. Display these texts, then give them to children to take home and share with their families.

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L99 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING

SOURCE: Costa, A.L. (ND). Teacher behaviors that enable student thinking. In Developing minds: A resource book for teaching thinking, p. 125-137.

DESCRIPTION: Advice is given to teachers on their behaviors that promote critical thinking and increase student involvement. Teacher behaviors are discussed in these categories: Questioning, Structuring, Responding, Modeling.

SUMMARY/GUIDELINES:

1. **Questioning. Consider and vary question types.**
 - a. **INPUT** - Questions that require information from students and include tasks such as: Naming, Counting, Matching, Listing, Defining, and Identifying.
 - b. **PROCESS** - Questions that require students to relate concepts by: Explaining, Contrasting, Comparing, and Sequencing.
 - c. **OUTPUT** - Questions that require students to apply concepts by: Speculating, Evaluating, and Judging.
2. **Structuring Classroom. Teachers should make students responsible for thinking throughout the school day during individual, group, and total group lessons using these teacher behaviors:**
 - a. Reviewing
 - b. Repeating
 - c. Preparing for Next Topics
 - d. Allowing Students Time to Think Before Responding
 - e. Using Visual and Verbal Examples
 - f. Providing Active Supervision
 - g. Promoting Debate and Problem Solving
3. **Responses. Teachers should avoid closed responses (criticism or overused praise) and use open responses (silence, acceptance of response, clarification, addition of data) that extend student participation.**
4. **Modeling Cognition. Teachers should often think aloud and model problem-solving behavior.**

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L100 PRACTICAL STRATEGIES FOR THE DIRECT TEACHING OF THINKING
SKILLS

Source:

Practical Strategies for the Direct Teaching of Thinking Skills;
Barry K. Beyer; Developing Minds: A Resource Book for Teaching
Thinking. Alexandria, VA: ASCD, 145-150.

Description:

Placing students in situations where they must think does not
'teach' thinking skills. To improve the proficiency of student
thinking direct instruction of thinking skills is often needed.
A framework for teaching critical thinking skills is given with
guidelines for teaching these skills.

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L101 COOPERATIVE SCRIPTS FOR PAIRED LEARNING

Source:

Slavin, R.E. (1988). Educational Psychology: Theory into Practice. Englewood Cliffs, NJ: Prentice Hall, 192-194.

Description:

This strategy builds upon the traditional study strategy of studying with a friend. With Cooperative Scripts students work in pairs and take turns in the roles of 'recaller' and 'listener.' Steps are explained.

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L102 STUDENT TEAMS ACHIEVEMENT DIVISIONS

Source:

Slavin, R.E. (1988). Educational Psychology: Theory into Practice. Englewood Cliffs, NJ: Prentice Hall, 395-398.

Description:

Steps for this cooperative learning method are given which include a regular cycle of teaching cooperative study in mixed-ability teams and quizzes followed by recognition or other rewards for teams whose members exceed their previous records. Research and practice have shown this strategy to be very effective.

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L103 RECIPROCAL TEACHING

Source:

Slavin, R.E. (1988). Educational Psychology: Theory into Practice. Englewood Cliffs, NJ: Prentice Hall, 198-201.

Description:

Reciprocal Teaching is a method for teaching metacognitive reading skills to students who are having comprehension problems. Teachers can use this technique to help students improve such comprehension skills as learning to find main ideas and summarizing. Steps of the procedure are given with a sample dialogue of a teacher talking to his or her class.

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L104 TEAM ASSISTED INDIVIDUALIZATION

Source:

Team Assisted Individualization: Cooperative Learning and Individualized Instruction in the Mainstreamed Classroom. Robert E. Slavin; RASE 5(6), 33-42 (1984).

Description:

This cooperative learning technique is well known for accommodating the social and academic needs of mainstreamed math students. Research which supports its use is summarized and steps for implementing the technique are given.

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L105 TEACHING EXPRESSIVE SKILLS HANDWRITING

Source:

Marsh, G.E., Price, B.J., & Smith, T.E.C. (1983). Teaching mildly handicapped children. St. Louis: The C.V. Mosby Company, 214-220.

Description:

This teaching option tells how to assess students' handwriting problems and how to improve their skills. Also included are modifications for specific disabilities.

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L106 APPLICATIONS OF MATHEMATICS IN OTHER SUBJECT AREAS

Source:

Cawley, John F. (1985). "Applications of Mathematics in Other Subject Areas" by Mahesh C. Sharma, Secondary School Mathematics for the Learning Disabled, Aspen Publications.

Description:

The purpose of the teaching option is to examine the question of what mathematical tools should the learning disabled student have to study other subjects that involve mathematical concepts. Academic and vocational areas are considered.

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L107 MATHEMATICS AND VOCATIONAL PREPARATION

Source:

Cawley, J.F. (1985). Secondary school mathematics for the learning disabled. Rockville, MD: An Aspen Publication, 201-233.

Description:

This teaching option focuses on the vocational education of the learning disabled adolescent and stresses the development and implementation of comprehensive mathematics programs which meet the needs of vocational education. A list of important numerical and quantitative skills is given.

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L108 FRACTIONS DECIMALS PERCENTAGES

Source:

Cawley, J.F. (1985). Secondary school mathematics for the learning disabled. Rockville, MD: An Aspen Publication, 115-149.

Description:

From a text on teaching math to secondary learning disabled students this chapter gives a scope and sequence of content in fractions decimals and percent and suggests teaching activities.

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L109 GEOMETRY CONCEPTS AND SKILLS

Source:

Cawley, J.F. (1985). Secondary school mathematics for the learning disabled. Rockville, MD: An Aspen Publication, 151-177.

Description:

The purpose of this teaching option is to demonstrate some of the adaptations of existing materials and methods that are needed to teach geometry to learning disabled students.

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L110 ESTIMATING TEXT READABILITY

Source:

Fry, E. (1977). Fry's readability graph: Clarifications, validity, and extension to level 17. Journal of Reading, 243-252. (Pub: IRA)

Description:

Often teachers become aware that one or more students are poorly matched with their assigned reading materials. Using Fry's readability formula and graph may determine that text is too difficult for a student to read. This teaching option presents both the simple-to-use formula and graph and an article by Fry clarifying and extending his technique.

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L111 MANAGING THE ASSIGNMENT

SOURCE: Wood, J.W. (1984). Adapting Instruction for the Mainstream. Columbus: Charles E. Merrill Company.

DESCRIPTION: When students display poor organization skills, teachers sometimes need to look at factors related to the assignments themselves as well as to student behavior. Inappropriate behavior may be symptomatic of a poor fit with the assignment. This teaching activity gives teachers guidelines for looking at assignment directions, the difficulty level of assignments, and adapting assignments and materials.

SUMMARY/GUIDELINES:

Assignment Directions: Are directions stated in a way that all students can understand them? Never assume that everyone hears or sees the directions; observe behavior at the beginning of the task. Make directions clear and simple. Present directions orally and visually. Have a selected place on the board for directions. Get total class attention before giving directions. Give directions one at a time. Check student comprehension of directions. Encourage students to do a good job.

Assignment Difficulty:

When an assignment seems too difficult for a handicapped student, try one or more of the following:

1. Reduce the amount of work.
2. Adapt the assignment to reduce the difficulty.
3. Break the task down into small sequential steps.
4. Start teaching at the first step in a sequence of steps.
5. Do not assume that the handicapped has copied the assignment correctly.
6. Make copies of assignments for the week to give to the student and to the resource teacher.

Adapting the Assignment. Follow these steps:

1. Assess for the appropriate instructional level.
2. Use feedback from the assessment to plan adaptations.
3. Use assignments as ongoing parts of all types of classwork.
4. Consistently modify teaching techniques and media.
5. Relate all tasks to the assignment objectives.
6. Make tasks sequential.
7. Break assignments down into small increments.
8. Use short, rather than long, practice periods for skills.
9. Begin all assignments with a purpose; involve students.
10. Orient students to major points of the assignment.
11. Announce when time for assignment is nearly completed.
12. Do not punish handicapped students by having them complete work during break time or after school.

Adapting Materials. Ask these questions during selection:

1. Is it a match for students' instructional level? Learning style? Interests? IEP objectives? Is it sequential?
2. Does it insult students' dignity?
3. Does it have several evaluation steps? Support materials?
4. Is it compatible with teaching method, style, approach?

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L112 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS

SOURCE: Fagen, S.A., Graves, D. L., & Tessier-Switlick, D. (ND).
Promoting Successful Mainstreaming: Reasonable Classroom
Accommodations for Learning Disabled Students. Rockville, MD:
Montgomery County Public Schools.

DESCRIPTION:

Often accommodations are necessary to enable learning disabled students to perform to the best of their abilities, and often poor organizational behavior is at the core of their disability. This teaching activity lists accommodations regular teachers have found to be effective with their learning disabled students and are either positive or neutral with their whole class.

SUMMARY/GUIDELINES:

See teaching activity L112 for lists of accommodations in these areas:

- All Subject Areas
- Reading/Literature
- Spelling/Writing
- Social Studies/Science

Accommodations which are the easiest for the teacher to implement are marked with an asterisk (*).

All accommodations are recommended for all grade levels, unless marked "ELEMENTARY" or "SECONDARY".

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L113 PLAIN PAPER FOR WRITING

SOURCE: Bauer, J. (1988). Plain paper for writing. The Reading Teacher, 483-484.

DESCRIPTION: Lines on primary paper may actually be a hindrance to some students. Giving students unlined paper for story writing may help them to express themselves more freely and worry less about being correct. This approach is discussed briefly, and teachers of the youngest students are encouraged to give it a try.

SUMMARY/GUIDELINES:

This technique consists simply of having young children write stories on unlined paper for at least some of their assignments. See the teaching activity -- the article by Bauer -- for further discussion of the rationale.

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L114 TAPE RECORDERS FOR DICTATING IMAGINATIVE STORIES

SOURCE: Damon, B.L.P. (1988). Tape recorders for dictating imaginative stories. The Reading Teacher, 484-485.

DESCRIPTION: This teaching activity recommends a technique for using tape recorders to motivate young students to express themselves. The approach minimizes the stress sometimes associated with writing and promotes students' sense of pride in their work. Steps are given.

SUMMARY/GUIDELINES:

1. Student selects an action picture, or draws an action picture.
2. Student reflects on what is happening, with the teacher prompting for who, where, when, what is going on, why, what will happen and why, if prompting is necessary.
3. Student tells his or her story into the tape recorder, which should be in a private part of the room.
4. Student listens to the story for pleasure.
5. Teacher, or other qualified adult, listens to story and writes it as stated.
6. Student and teacher edit the story together, changing such features as sentence beginnings, deleting excessive and's and then's, and deleting repetitions.
7. Teacher, or other qualified adult, rewrites or types the final version.
8. Student reads the story to teacher and then to others or into the tape recorder to be shared later.
9. Optional: Teacher may add student stories to class reading program.

**** The benefit to student's self-esteem is enormous! ****

**** The instructional value of making this kind of speaking-listening-writing-reading connection is enormous! ****

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L115 TEACHING LISTENING SKILLS

SOURCE: Forster, P., & Doyle, B.A. (1989). Teaching listening skills to students with attention deficit disorders. Teaching Exceptional Children, 20-22.

DESCRIPTION: A problem of many students, particularly those said to have attention deficit disorders, is that they must learn to focus and maintain attention so that they can develop academic skills. This teaching activity is a step-by-step method of teaching secondary students to listen for key elements. The method ties in with current events instruction.

SUMMARY/GUIDELINES:

Prepare Materials, consisting of a taped newscast, an outline frame, such as the following, and a quiz where students will demonstrate their recall based on use of the tape and outline frame.

Topic: Weather

Main idea:

Details:

Topic: Medicare Spending

Main idea:

Details:

Vocabulary/New Idea:

Topic: California

Main idea:

Details:

Vocabulary/New Idea:

etc.

Establish a purpose, which involves telling students that the lessons are designed to help improve their listening skills and their knowledge of current events.

Organize prelistening by demonstrating the use of the outline frame that accompanies the tape and making sure they know the necessary vocabulary.

Present the Listening Exercise. Students listen and write notes.

Clarify by answering students' questions and providing necessary background information.

Recapitulate. Students are asked to reconstruct the broadcast from memory, without use of outline notes, while teacher writes notes on board. Comparison is made with outline notes.

Summarize. Students dictate summary of news broadcast; teacher records.

Evaluate. Give quiz. Correct it orally without penalty for poor spelling, etc. Discuss unclear points. Chart individual progress. Compare outlines with quizzes, noting any areas that would benefit from re-teaching.

L116

LARGE GROUP PRESENTATIONS AND DISCUSSIONS

SOURCE: Booklet Sections: "Lectures/Large-Group Presentations, and Discussions" pp. 11-12
in "Lectures/Large Group Presentations, Discussions, Peer Tutoring, Individualizing Instruction,
Learning Centers and Group Projects", a booklet in The Solution Book: A Guide to Classroom
Discipline by Randall Sprick. SRA 1971.

DESCRIPTION: Approaches to managing large group lectures and discussions
include using questions for active involvement, visual aids, and appropriate
pacing. These approaches are described and suggestions for dealing with
misbehavior, such as clarifying rules, are discussed.

SUMMARY:

Here are some suggestions for effective large group presentations:

1. Gear the length of session to the age and attention span of the group. Primary grades: 1-15 minutes, elementary : 5-30 minutes, secondary: may depend on class members.
2. Use questions to keep students actively involved in lesson and to determine if students are listening.
3. Use visual diagrams (like flowcharts) to help students see relationships between concepts.
4. Vary your presentation style. Break your presentation with a joke, a stretch time, etc.
5. Keep your presentation moving.
6. If some students misbehave, praise those who are behaving.
7. Stay calm.
8. Use a variety of activities: discussions, individual projects, small group projects in addition to large group activities.

L117

STRUCTURING INDEPENDENT WORK

SOURCE: Excerpt from booklet: Small-Group Instruction and Independent Seatwork. Booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick, SRA 1971.

DESCRIPTION: Independent seatwork is a much used instructional option for a whole class or mixed with small group work, but some students' misbehavior during independent work can detract from instruction. Suggestions are given for managing student behavior while they are working on their own.

SUMMARY: In the booklet are outlined five steps to remember in planning seatwork. In addition, six possible classroom arrangements are pictured.

Step 1. Make sure work assigned is at an appropriate instructional level.

Step 2. Prepare cushion activities for those who finish work early.

Step 3. Design procedures that allow students to ask questions about their work. For example, students can signal the teacher by putting their open books at an angle on their desks, or put their questions in a specially designed question box.

Step 4. Design and discuss rules for seatwork time.

Step 5. Give instructions on any worksheets before beginning the session.

L118

INDIVIDUALIZED PROGRAMMING

SOURCE: Excerpt (pp. 122-125) from chapter 4 in J. Worell and C. M. Nelson, Managing Instructional Problems: A Case Study Workbook, 1974. Also excerpt (pp. 15-20) from book G in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA, 1971.

DESCRIPTION: Academic restructuring may help some students improve their class behavior. Individualization is one way to tailor instruction to the student's needs. Some suggestions are given for designing individual work that can make the process efficient and effective.

SUMMARY:

After assessing student abilities, analyzing the task, and writing behavioral objectives for individual assignments, follow these guidelines:

1. Have a clear set of goals for students.
2. Match materials to the student. Choose work that can be completed independently.
3. Use of variety of presentation modes and materials. Go beyond worksheets to filmstrips, tape recorders, and self-made materials.
4. Use materials that can be scored or tested objectively.
5. Develop a checking system that can be used by teacher and student.
6. Design a reinforcement component if necessary.
7. Provide a peer-tutor if needed. (See B28 USING PEERS TO ATTAIN EDUCATIONAL GOALS)
8. Allow proper amount of time: 15 minutes for primary, longer for older students.

L119

INCREASING ATTENTIVENESS, DECREASING WITHDRAWAL

SOURCE: Chapter 2 in M.S. Swift and G. Spiveck, Alternative Teaching Strategies: Helping Behaviorally Troubled Children Achieve. 1975.

DESCRIPTION: Students act inattentive and withdrawn for physical, situational, and emotional reasons. Strategies for encouraging such students include: relating assignments to the student's interests, giving short, clear instructions, responding to and rewarding attending behaviors, and involving the student in the task by self-recording activities and attending behaviors.

SUMMARY:

Some strategies for increasing student attention are:

To get student's attention:

- Pause after asking question, look at different students before calling on anyone.
- Call on students in a random order. Let them know that you may call on anyone.
- Create a level of uncertainty by asking what would happen next or how will something end.
- Move closer to inattentive student.
- Point out in his/her book while continuing to talk to class.
- Alert the student what to listen for.
- Alert the student that he/she will be called on.
- Give short, clear instructions.

To keep student's attention:

- Break long assignments into short tasks. Ask to see intermediate products.
- Gradually lengthen longer work sessions.
- Use manipulative materials when possible.
- Involve the student in a special role or task.
- Use praise to indicate success in attending or improvement of attention.
- Talk to student privately about good attending behavior.
- Have student record his/her own efforts to attend.
- Have student record length of time needed to complete assignments.

L120

MEETING NEEDS OF RESTLESS, SOCIALLY OVERINVOLVED STUDENT

SOURCE: Chapter 10 in M.S. Swift and G. Spivack, Alternative Teaching Strategies: Helping Behaviorally Trouble Children Achieve, 1975.

DESCRIPTION: Some strategies that have proven effective with restless students include: 1.) legitimizing energy release, 2.) clarifying and articulating teacher expectations, 3.) signaling the student in several ways, 4.) selective use of attention, 5.) reprimanding, 6.) using physical placement in the classroom, 7.) capitalizing on social motivation by involving the student in group activities, 8.) using student self-monitoring techniques, and 9) contracting. Steps are outlined for each of these strategies.

SUMMARY: STRATEGIES FOR RESTLESS STUDENTS:

Provide energy release:

- Ignore as an initial response (See B 18 Praise Good Behavior and Ignore Bad Behavior).
- include skits, stories than involve movement and noisemaking. Provide a stretch break.
- Give restless student jobs around the class that involve movement like handing out papers or taking attendance.

Clarify the problem:

- Discuss the situation with student. Give your impression and find out how student perceives his/her behavior in a specific situation.
- Have student write why he/she acts a certain way.

Other strategies:

- Praise student when he/she starts to comply. For example, comment on a student's getting a book out or is on the correct page. Attend to appropriate behavior.
- Use soft and personal reprimands.
- Use mild punishment such as writing student's name on board and marking disruptive incidents.
- Use physical placement in the class. Seat two disruptive students together and reward one and the other may learn also. Temporarily isolate disruptive student with independent work.
- Capitalize on social motivation by allowing student to tutor classmates, providing projects to do, and allowing student to voice opinions in group discussions.

L121

TEACHER VERBAL STRATEGIES

SOURCE: Article titled "Teaching Handicapped Children with Attention Problems: Teacher Verbal Strategies Make a Difference: in Teaching Exceptional Children, Spring 1986.

DESCRIPTION: Several strategies have been proven effective in increasing attention and decreasing disruptive behavior with special populations. These strategies involve teacher presentation factors, like pace of delivery and verbal cues, as well as related reinforcement.

SUMMARY:

Here are some techniques that have been shown to be effective in helping students pay better attention:

1. Increase pace of the lesson.
2. Ask as many drill questions as possible for student responses
3. Ask for repetitions of correct answers.
4. Use specific rather than general praise for good behavior.
5. If a student can't answer, cue the response by pointing out important features, giving hints, or modelling the correct responses.

CONTINGENCY CONTRACTING

SOURCE: Folder containing several readings on contingency contracts. Includes book: How to Use Contingency Contracting in the Classroom by Lloyd Homme (1973), and readings: "Contract Teaching" by R. M. Wilson and L. B. Gambrell and "Contracting Guide".

DESCRIPTION: Contingency contracting involves developing written agreements between teacher and student regarding behavioral goals and the rewards that will be delivered for attainment of the goals. Examples and strategies for contracting are provided.

SUMMARY:

RULES FOR CONTRACTS:

1. Payoff should be immediate.
2. Initial contracts should call for and reward small steps.
3. Reward frequently with small amounts.
4. Reward accomplishment rather than obedience.
5. Reward the performance after it occurs.
6. Be fair. Both sides of the contract "If you do Y, I will do X" must be of relatively equal weight.
7. Be clear.
8. Be honest.
9. Be positive. NOT "I will not do X, if you do Y".
10. Be systematic.

STEPS FOR CONTRACTING:

1. Select one or two behaviors to work on first.
2. Describe behaviors so that they can be observed and counted.
3. Identify rewards that will help provide motivation to do well.
4. Locate people who can help to keep track of the behavior and who can give out rewards (e.g. aids, social worker, special ed. teacher).
5. Write the contract clearly.
6. Collect the data.
7. Adjust the contract if there is no improvement.
8. Rewrite contract monthly whether or not there is improvement.
9. Continue to monitor, adjust, and rewrite until there is improvement.
10. Select another behavior to work on.

L/23

MOTIVATION

SOURCE: Brophy, J. Socializing Students' Motivation to Learn. In Advances in motivation and achievement: Enhancing motivation, Volume 5 (pp181-210). JAI Press .

DESCRIPTION: Motivation to learn can be described as student attention to lessons and engagement in academic learning tasks in classrooms. Strategies to help increase student motivation are presented in two categories:
1.) strategies to establish motivation to learn and, 2.) strategies toht capitalize on existing intrinsic motivation in order to make the academic tasks more enjoyable for students.

SUMMARY:

Here are some examples of strategies for motivating students:
Tap the student's interests by:

- Showing enthusiasm. Teachers can model attitudes by showing how assignments interest him/her.
- Make abstract concepts more personal, concrete, or familiar.
- Provide feedback that is quick, clear, specific, and constructive.
"Nice work on that project!"

Make the tasks enjoyable by:

- Allow students to interact with the lesson and materials as much as possible. Include activities such as projects, experiments, simulation, and role play.
- Try to present lesson like a game or include features such as challenges, puzzles, suspense, and problem solving.
- Allow students to work together in pairs or small groups (See B25 Cooperative Learning).

Motivation can be affected by general classroom atmosphere:

- Give students assignments appropriate to their abilities and encourage them to try.
- Provide assignments that have a purpose and relate the purpose to student experiences.

L124

SETTING GOALS FOR STUDENTS

SOURCE: Booklet Chapter: "Setting Goals for Student Behavior" in Ignoring Misbehavior and Setting Goals for Student Behavior, a booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA 1971.

DESCRIPTION: Goal setting is a way to help a teacher keep on track with students by planning ahead and having a strategy in mind when misbehavior occurs. Four steps for goal-setting are outlined.

SUMMARY:

FOUR BASIC STEPS IN SETTING GOALS FOR STUDENT BEHAVIOR:

1. Determine what academic and/or social goals each student should focus on.

This should be done every month so that if a goal is achieved, a new goal can be established.

2. Put priorities on goals.

It may be impossible to achieve every goal and some students will need more help than others to achieve their goals. Therefore, the teacher needs to determine which goals should receive the most time and energy.

3. Communicate the goal or goals to each student.

As much as possible, students should know what the teacher feels they need to work on.

4. Involve the students in goal setting so that they learn to set goals for themselves.

Have students discuss goals that they would like to achieve. Help them to decide if it is long term or short term. Then have them identify a weekly or monthly classroom goal and give them feedback on their efforts.

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L125 STRATEGIES TO INCREASE INVOLVEMENT

Source:

Think-Pair-Share materials are from the Howard County Teacher Education Center, Southern Area. Every Pupil Responds materials are from the Reading Center, University of Maryland. (Both are public domain.)

Description:

Students' academic success is often related to the amount of active involvement they have in the classroom. Use of effective questioning techniques can increase their active responding. This teaching activity presents two techniques for increasing participation; these techniques are: Think-Pair-Share and Every Pupil Responds.

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Behavior Strategies in the Expert System Knowledge Base

Below is a listing of the strategies that may be recommended by the Behavior Strategy Selector. Follow this listing are one-page summaries of each strategy.

- B1 Principles Of Reinforcement
- B2 Changing Classroom Environment To Meet Student Needs
- B3 Managing Surface Behavior
- B4 Time Out
- B5 Increasing Positive Interactions
- B6 Ten Steps To Good Discipline
- B7 Effective Punishment
- B8 Large Group Presentations And Discussions
- B9 Structuring Independent Work
- B10 Token Reinforcement Techniques
- B11 Establishing Classroom Rules
- B12 Teacher Verbal Strategies
- B13 Conflict Resolution
- B14 Reducing Stress Of Students In Conflict
- B15 Contingency Contracting
- B16 Preventive Discipline In Early Childhood
- B17 Group Contingencies
- B18 Praise Good Behavior And Ignore Bad Behavior
- B19 Setting Goals For Students
- B20 Self Monitoring Academic Progress
- B21 Student Self Monitoring Behavior
- B22 Conferencing With Students And Parents
- B23 Attending To Student Feelings
- B24 Observing Behavior
- B25 Strategies For Cooperative Learning
- B26 Let Elementary Students Choose Their Reward
- B27 Using Peers to Attain Educational Goals
- B28 Changing Disruptive Behavior
- B29 Individualized Programming
- B30 Improving Social Deficits
- B31 Improving Student Motivation
- B32 Practicing Positive Reinforcement
- B33 Communication Strategies
- B34 Increasing Attentiveness - Decreasing Withdrawal
- B35 Meeting The Needs Of The Restless, Socially Over Involved Student
- B36 Social Skills Strategies
- B37 Self Control Training
- B38 School Home Motivation
- B39 Organizing Playtimes For Primary Students
- B40 Skill Streaming For Adolescents
- B41 Response Cost
- B42 Let Secondary Students Choose Their Reward
- B43 Teaching Social Communication Skills
- B44 Learning Stations
- B45 Grading
- B46 Managing The Assignment

B47 Accommodations For Students With Organizational Problems
B49 Think Pair Share
B50 Social Skills Curriculum Analysis
B51 Problem Solving
B53 Five Teaching Strategies For Social Effectiveness Training
B54 Think Aloud

B1 PRINCIPLES OF REINFORCEMENT

SOURCE: Booklet "Effective Reinforcement" in The Solution Book: A Guide to Classroom Discipline by Randall Sprich, SRA, 1971. Article by J. W. Tawney, D. M. Middleton, and P.T. Cegelka, "Behavior Modification or not....", Teaching Exceptional Children, Winter 1973.

DESCRIPTION: Behavior modification techniques include reinforcement of desired student behavior. A broad overview of effective reinforcement is provided with classroom examples and some steps to follow in the use of social activity, and tangible reinforcers. Also included is a reading describing what behavior modification is and is not.

SUMMARY:

Guidelines-

Reinforce students who are doing it the right way.

When a misbehaving student begins to behave, reinforce.

Provide fun activities for the entire class.

Provide fun activities for a student who has improved in behavior or academics

BEHAVIOR MODIFICATION IS NOT:

punishment,
M&M's for all,
inconsistent,
expensive,
a dependency,
a one shot effort,
or highly complex

BEHAVIOR MODIFICATION IS:

an efficient technique for improving a student's social and academic behavior.

B2 CHANGING CLASSROOM ENVIRONMENT TO MEET STUDENT NEEDS

SOURCE: Excerpt of text beginning page 111 continuing pages 117-119 in M.M. Kerr and Nelson, Strategies for Managing Behavior Problems in the Classroom, 1983.

DESCRIPTION: Assessing classrooms and making small changes in physical settings can modify some student behaviors alone or in combination with other management strategies. An environmental checklist is provided to help teachers analyze their use of space.

SUMMARY:

CHECKLIST- (see attached) Use this as a guide to plan space in your classroom.

Also consider conditions that may affect students:

Noise, Temperature, Lighting, other physical factors

SUGGESTIONS FOR PRIMARY TEACHERS:

1. Use tape to mark student areas.
2. Use a signaling device. Some kind of "I need help" sign that will get teachers' attention without talking out or getting out of seat. (see example in booklet)

SUGGESTIONS FOR INTERMEDIATE TEACHERS:

1. Mark traffic patterns on floor to help with transitions.
2. Post rules clearly.

B2 cont.

PHYSICAL PLAN CHECKLIST

Directions: Ask yourself these questions about your classroom's physical plan: + means yes, - means no, ? means help is needed.

Doorway:

- _____ Clearly marked so that visitors can find it.
- _____ Has an envelope/pad/pencil for messages for others so that they will not have to interrupt class.
- _____ has plenty of room just inside for children to line up, without knocking things.

Walls:

- _____ Displays are at students' eye level.
- _____ Displays either offer entertainment____teach____or provide classroom information.
- _____ Students' work____art are displayed.
- _____ Blackboards are located within students' visual range.
- _____ Schedule for daily and nondaily activities is posted____Written so that students can read it.
_____Written in no more than 30-minute time blocks____is current.
- _____ Some walls are clean for visual "rest."
- _____ Chipping paint and malfunctioning electrical outlets have been reported.

Furniture:

- _____ Each student's desk is the correct size.
- _____ Each student's desk is arranged so that the student can see and participate readily in
seatwork
activities____teacher presentations____chalkboard lessons.
- _____ Each student has own desk.
- _____ Each student's desk is organized for ready access to materials and supplies.
- _____ Desks are in their best arrangement for pupil activities____You can move easily from one
desk to another .
- _____ There are other types of room furniture, carpets, etc. so that students are not always
seated in their desks.
- _____ Students are seated with other children with whom they can work successfully.

Storage:

- _____ Instructional materials are stored so that you can find anything within 10 minutes.
- _____ Materials are stored in a logical order and place.
- _____ Student records are kept in a convenient____orderly place.

Other concerns:

B3 MANAGING SURFACE BEHAVIOR

SOURCE: "Managing Surface Behavior of Children in School" by N.J. Long and R.G. Newman.
Article beginning on page 308 of Long, Morse and Newman's Conflict in the Classroom (3rd edition).

DESCRIPTION: Four major alternatives to punishing misbehavior are 1) permitting, 2) tolerating, 3) interfering, and 4) preventive planning. The goal is to find the right combination of techniques for each student. Guidelines are given for how and when to use these techniques.

SUMMARY: Here are some examples of techniques to manage behavior:

1. PERMITTING- State clearly what behavior is allowed for particular tasks.
2. TOLERATING- Expect some mistakes from novices.
3. INTERFERING- Several ways to interfere are:
 - Planned ignoring
 - Stand close to disrupter
 - Use of humor
 - Provide extra help with difficult assignments
 - Have student leave area for a few minutes
4. PREVENTION- Establish routines and classroom procedures.

B4 TIME OUT

SOURCE: Part of Chapter 5, "Description of Disruptive Behavior", pages 131-134 in M. M. Kerr and C. M. Nelson, Strategies for Managing Behavior Problems in the Classroom, 1983. Chapter 7, "Time out procedures" in Alberto, P. A. & Troutman, A. C. (1986). Applied behavior analysis for teachers, 2nd Edition, (pp. 246-253). Columbus, OH: Merrill.

DESCRIPTION: Time-out, a widely used behavior management strategy, gives a misbehaving student time-out from positive reinforcement. Three different types of time-out : ignoring (nonseclusionary), contingent observation (exclusionary), and seclusionary are described and guidelines are provided for their use.

SUMMARY:

1. **IGNORING-** Teacher gives a time-out by turning away or averting eyes during misbehavior. This is most effective when a student inappropriately tries to gain teacher attention.
2. **CONTINGENT OBSERVATION-** Student is removed to sit and watch quietly before returning to group.
3. **SECLUSIONARY-** Student is removed from instructional area to the back of the room, or study carrel. This technique should be used for serious disruptive or aggressive behavior and after consulting supervisor and parent.

CAUTION: With any time-out procedure it is important to keep accurate records of time and behaviors and to provide positive rewards for good behavior.

B 5 INCREASING POSITIVE INTERACTIONS

SOURCE: Excerpt from book, p. 93 in M. M. Kerr and C. M. Nelson Strategies for Managing Behavior Problems in the Classroom, Columbus, OH: Merrill. Booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprich, SRA, 1971.

DESCRIPTION: The teacher is a very important person in the life of the student. This training option gives teachers concrete ways to focus on the strengths of their students. The usual outcome of this approach is that students' behavior improves and more learning occurs.

SUMMARY: Here are some steps to help you look at your interactions with students:

1. Tape record 30 minutes of your interactions with students during a particularly difficult period.
2. After class, listen to the tape and count the number of positive and negative interactions that occurred. A ratio of 3 positive comments to 1 negative comment could be a goal.
3. Think about the effects of your nonverbal signals (winks, glares, smiles, etc.)
4. Listen to see if your praise matches student behavior. Do they get more or less praise with more or less effort?
5. Listen to see if your praise seems sincere.
6. Listen to see if you vary the words you use to praise. A good technique is to describe the behavior you are pleased with.
7. See if you distribute your negative and positive interactions fairly.
8. Develop a plan for improving the quality of your interactions with students.

B 6 TEN STEPS TO GOOD DISCIPLINE

SOURCE: "Ten Steps to Good Discipline" by William Glasser (1977) in Today's Education, November-December, 1977, pp 61-63.

DESCRIPTION: The ten step program that Glasser describes as 'constructive, no-nonsense, non-punitive' is called 'Reality Therapy' and is a school-wide approach to dealing with discipline problems. The ten steps are described and general suggestions of: be personal, refer to present behavior, do not use value judgments, plan alternatives, be committed, don't accept excuses, do not punish, and never give up, are provided.

SUMMARY: The first 7 steps can be instituted by teachers. The last 3 steps need to be coordinated with building administration and parents. The steps are:

1. Take quiet time to analyze an ongoing discipline problem. Make a list of what you do in response to it. Be honest.
2. Analyze your response list. Don't continue with the responses that aren't successful.
3. Plan a better tomorrow. Have a positive attitude toward the student.
4. Ask the student, "What are you doing?". When the answer contains the behavior then ask the student, "Please stop".
5. Have a short conference. Ask the student the question in step 4 again and add "Is it against the rules?" and "What should you be doing?". Expect appropriate behavior. Convey warmth and firmness.
6. Repeat step 5 and add "We have to work this out". Make a plan with the student that is short-term, specific and simple.
7. Give the student a time-out. This may be as a result of your plan in step 6.
8. Accept no excuses. Have the student do In-School Suspension and make a plan to return to class. Obtain parent permission if for more than one day.
9. Have parents take child home to return the next day.
10. Refer the student to another agency.

B 7 EFFECTIVE PUNISHMENT

SOURCE: Booklet: Effective Punishment, a booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA 1971.

DESCRIPTION: A punisher reduces the likelihood that a behavior will reoccur. Punishment can change student behavior quickly, but there are some drawbacks. These drawbacks are explained and guidelines for the effective use of punishment are given.

SUMMARY:

GUIDELINES FOR EFFECTIVE USE OF PUNISHMENT:

1. Punishment must change the behavior.
2. Punishments must be accompanied by a plan for rewarding successes.
3. Punishments should always be implemented calmly.
4. Punish only a few, carefully chosen behaviors.
5. Be consistent in punishment.

PUNISHMENT STRATEGIES:

Time out- see B 4 or back up materials for B 7.

Owing time- student pays back time after school or during free-time

Cost contingency- fines as part of a point system. (See B 41 or materials for B 7.)

Sending notes to parents- easy to use, should be balanced with positive notes on occasion.

Sending students to principal or counselor- OK if not overused

CAUTIONS: Punishment may become rewarding in itself. Punishment may cause undo fear and anxiety. Consider alternatives like discussing problem with student, ignoring misbehavior, and reinforcing students who are behaving (See B 18).

B 8 LARGE GROUP PRESENTATIONS AND DISCUSSIONS

SOURCE: Booklet Sections: "Lectures/Large-Group Presentations, and Discussions" pp. 11-12 in "Lectures/Large Group Presentations, Discussions, Peer Tutoring, Individualizing Instruction, Learning Centers and Group Projects", a booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA 1971.

DESCRIPTION: Approaches to managing large group lectures and discussions include using questions for active involvement, visual aids, and appropriate pacing. These approaches are described and suggestions for dealing with misbehavior, such as clarifying rules, are discussed.

SUMMARY:

Here are some suggestions for effective large group presentations:

1. Gear the length of session to the age and attention span of the group. Primary grades: 1-15 minutes, elementary: 5-30 minutes, secondary: may depend on class members.
2. Use questions to keep students actively involved in lesson and to determine if students are listening.
3. Use visual diagrams (like flowcharts) to help students see relationships between concepts.
4. Vary your presentation style. Break your presentation with a joke, a stretch time, etc.
5. Keep your presentation moving.
6. If some students misbehave, praise those who are behaving.
7. Stay calm.
8. Use a variety of activities: discussions, individual projects, small group projects in addition to large group activities.

B 9 STRUCTURING INDEPENDENT WORK

SOURCE: Excerpt from booklet: Small-Group Instruction and Independent Seatwork. Booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick, SRA 1971.

DESCRIPTION: Independent seatwork is a much used instructional option for a whole class or mixed with small group work, but some students' misbehavior during independent work can detract from instruction. Suggestions are given for managing student behavior while they are working on their own.

SUMMARY: In the booklet are outlined five steps to remember in planning seatwork. In addition, six possible classroom arrangements are pictured.

Step 1. Make sure work assigned is at an appropriate instructional level.

Step 2. Prepare cushion activities for those who finish work early.

Step 3. Design procedures that allow students to ask questions about their work. For example, students can signal the teacher by putting their open books at an angle on their desks, or put their questions in a specially designed question box.

Step 4. Design and discuss rules for seatwork time.

Step 5. Give instructions on any worksheets before beginning the session.

B 10 TOKEN REINFORCEMENT TECHNIQUES

SOURCE: Book: Token Reinforcement Techniques by H. M. Walker and N. K. Buckley, 1974.
Chapter 3, pp. 29-45 contains most useful information.

DESCRIPTION: The goal of using token reinforcement is to improve the child's learning and performance within the regular classroom setting. A system of exchanging tangible rewards for appropriate student behavior can be instituted and maintained relatively easily. This teaching option contains a description of how to use a token reinforcement system.

SUMMARY: Here are the procedures for setting up a token economy. These procedures are outlined in more depth in chapter 3.

A. Specify which behaviors should be reinforced:

Specify quality as well as quantity;
Gradually make chunks of behavior necessary to
earn reinforcer bigger;
Start with daily and move to weekly reinforcements.

B. Identify and select appropriate reinforcers:

Include those available and those needing purchase;
Involve students in the selection;
Change reinforcement list often.

C. Establish wage and price system:

Price items at cost;
Match work time to cents: a guideline is 5 cents/hour work;
Match token to cents;
Match token to time.

D. Select and use tokens:

Choose for ease and convenience - chips, cards;
Combine tokens with praise;
Don't haggle with students.

B 11 ESTABLISHING CLASSROOM RULES

SOURCE: Curwin, R. L. & Mendler, A. N. (1984). High Standards for Effective Discipline. Educational Leadership, p. 75-76.

DESCRIPTION: Student off-task behavior results in an estimated 15-25% loss in instructional time. Both students and teachers function best when limits and expectations are clearly defined. Six elements of the social contract (rule-making) between students and teachers are outlined.

SUMMARY:

"Developed jointly by the teacher and students, social contract is composed of rules and consequences that describe acceptable and unacceptable classroom behavior." (p.75) Six elements of this contract are:

1. **Flag rules.** These are minimum standards set by the teacher without negotiation. An example is "Use polite language. No swearing."
2. **Negotiable rules.** Rules that teacher and students decide together to adopt. Teachers need to balance student input with need for order in the classroom.
3. **Consequences.** Teachers determine consequences without student input. Consequences should be mild leading to serious, instructional rather than punitive, and natural and logical extensions of the rules. Positive consequences should be included to reward good behavior.
4. **Rules for the teacher.** Students may be more committed to rules set for them when they have limited input on standards for teachers. Teachers do not have to accept any rules that compromise their position. Examples of rules for teachers are: "Teachers will return written work within 3 days." or "Teacher will not yell at students in front of their classmates."
5. **Student-developed rules for students.** This includes student input into making rules and consequences.
6. **A vote to determine which rules to enforce.** All rules (except for flag rules) are voted on by the class and must be accepted by 75% of the students.

B 12 TEACHER VERBAL STRATEGIES

SOURCE: Article titled "Teaching Handicapped Children with Attention Problems: Teacher Verbal Strategies Make a Difference" in Teaching Exceptional Children, Spring 1986.

DESCRIPTION: Several strategies have been proven effective in increasing attention and decreasing disruptive behavior with special populations. These strategies involve teacher presentation factors, like pace of delivery and verbal cues, as well as related reinforcement.

SUMMARY:

Here are some techniques that have been shown to be effective in helping students pay better attention:

1. Increase pace of the lesson.
2. Ask as many drill questions as possible for student responses
3. Ask for repetitions of correct answers.
4. Use specific rather than general praise for good behavior.
5. If a student can't answer, cue the response by pointing out important features, giving hints, or modelling the correct responses.

B 13 CONFLICT RESOLUTION

SOURCE: Public domain curriculum guide

DESCRIPTION: Learning about conflict may help students manage their own problems. Conflict can be presented as a part of personal and world situations with the goal of understanding the nature of constructive problem solving. Some example activities are presented.

SUMMARY:

Conflict resolution lessons and activities are provided for these topics:

1. Types of conflict.
2. Levels of conflict.
3. Sources of conflict.
4. Escalation of conflict.
5. Resolving conflict.
6. Understanding feelings about conflict.
7. Assertiveness.

Consult accompanying materials for detailed lesson plans.

B 14 REDUCING STRESS OF STUDENTS IN CONFLICT

SOURCE: 4-page xeroxed copy of an article by E. Duffner, N. J. Long, and S. A. Fegen, in The Pointer, Fall 1979.

DESCRIPTION: Students' behavior can be especially difficult to manage when they are in crisis or under stress. The article provided suggests eight strategies a teacher can use to help students cope with emotional stresses.

SUMMARY:

Here are some strategies to help a student deal with stress:

1. **Labelling and accepting feelings.** The teacher can look beyond angry or withdrawn behavior and try to label and support the student's feelings.
2. **Redirecting feelings into acceptable behavior.** Teacher can suggest appropriate school outlets like art, sports, dance, drama, or creative writing.
3. **Lowering school pressure.** Teacher can lower requirements or deadlines temporarily to ease student's academic pressure.
4. **Completing one task at a time.** Assist the student in reducing a task to a manageable unit of work. Give student a concrete task that you think he/she could master for a confidence builder.
5. **Accepting disappointment and failure.** Help student to deal with reality in disappointments and point out lessons learned.
6. **Helping less fortunate students.** Arrange peer-tutoring of less fortunate or younger students. (See B27- Peer Tutoring.)
7. **Helping the student seek professional help.** When stress seems to be chronic or overwhelming to a student, it may be best to refer a student for help in your school, or suggest to the parent that the student may need more help.

B 15 CONTINGENCY CONTRACTING

SOURCE: Folder containing several readings on contingency contracts. Includes book: How to Use Contingency Contracting in the Classroom by Lloyd Homme (1973), and readings: "Contract Teaching" by R. M. Wilson and L. B. Gambrell and "Contracting Guide".

DESCRIPTION: Contingency contracting involves developing written agreements between teacher and student regarding behavioral goals and the rewards that will be delivered for attainment of the goals. Examples and strategies for contracting are provided.

SUMMARY:

RULES FOR CONTRACTS:

1. Payoff should be immediate.
2. Initial contracts should call for and reward small steps.
3. Reward frequently with small amounts.
4. Reward accomplishment rather than obedience.
5. Reward the performance after it occurs.
6. Be fair. Both sides of the contract "If you do Y, I will do X" must be of relatively equal weight.
7. Be clear.
8. Be honest.
9. Be positive. NOT "I will not do X, if you do Y".
10. Be systematic.

STEPS FOR CONTRACTING:

1. Select one or two behaviors to work on first.
2. Describe behaviors so that they can be observed and counted.
3. Identify rewards that will help provide motivation to do well.
4. Locate people who can help to keep track of the behavior and who can give out rewards (e.g. aids, social worker, special ed. teacher).
5. Write the contract clearly.
6. Collect the data.
7. Adjust the contract if there is no improvement.
8. Rewrite contract monthly whether or not there is improvement.
9. Continue to monitor, adjust, and rewrite until there is improvement.
10. Select another behavior to work on.

B 16 PREVENTIVE DISCIPLINE IN EARLY CHILDHOOD

SOURCE: Article by P. S. Strain and D. M. Sainato in Teaching Exceptional Children, Summer 1987.

DESCRIPTION: Classroom strategies for preventing possible behavior problems in young children include establishing clear rules and routines, varying teaching modes, and reinforcing good behavior. Preventing behavior problems can maximize instructional time and provide a positive classroom atmosphere. This training option includes a description of preventive techniques.

SUMMARY:

Suggestions for preventing discipline problems are:

1. **Establishing Class Routines and Rules:** Select the smallest possible number of rules. Rules should have clear consequences for compliance and non-compliance.
2. **Making Transitions Smooth:** One strategy is to release students individually and guide them directly to a new activity. Another strategy is to use a buddy system for those who have difficulty understanding and following transition directions.
3. **Working in Groups:** Keep the students involved in group tasks by minimizing waiting, providing opportunities to respond frequently, and providing appropriate assignments.
4. **Working Independently:** Teach students to self-monitor assignments by providing them with a rating scale and cuing them to mark how they are doing. Mark your ratings and then match them with the student's and provide feedback.

B 17 GROUP CONTINGENCIES

SOURCE: Excerpts, pp. 96-7, pp. 103-105, and pp. 134-5, in M. M. Kerr and C. M. Nelson, Strategies for Managing Behavior Problems in the Classroom, 1983. Also included is a handout activity "warm fuzzies" and a research study using "good behavior game" by H. H. Barrish, M. Saunders, and M. M. Wolf, Journal of Applied Behavioral Analysis, pp. 112-124.

DESCRIPTION: Group contingencies can be effective in changing individual and group behavior by making use of social reinforcement in the peer group in a variety of settings. Group contingencies are defined as group or individual behavior performed for group reinforcement. General information and two examples of classroom group contingencies are provided.

SUMMARY:

Group contingencies or rewards can be divided into three types:

1. **Dependent** -- Rewards to the whole group depend on the performance of certain group members. These are most effective when group members are less disruptive than the target student or students.

Example: Having a class party depend on one specific student not being disruptive for two days.

2. **Independent** -- The reward is in common, but the contract for earning the reward is independent or individualized.

Example: For young children "warm fuzzies" can be given out for selected behavior, posted, and rewarded with an activity for a certain number. For older students, a point system can lead to the same reward.

3. **Interdependent** -- Rewards apply to the group contingent upon each member reaching a specified level of performance.

Example: The "good behavior game" is where a class is divided into teams. Points are tallied on performance of selected, desired behaviors. At the end of the class, the team with the most points gains a privilege.

B 18 PRAISE GOOD BEHAVIOR AND IGNORE BAD BEHAVIOR

SOURCE: Booklet Chapter: "Ignoring Misbehavior" in Ignoring Misbehavior and Setting Goals for Student Behavior, a booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick, SRA 1971. Article by David L. Martin, "Your Praise Can Smother Learning", Learning, 1977.

DESCRIPTION: In the classroom, a major alternative to punishment is ignoring misbehavior. One article in this training option explains how to recognize and ignore behavior that is intended to get teacher attention. Often accompanying ignoring is praising good behavior. A caution against the overuse of praise is presented in the other article in this training option.

SUMMARY:

STEPS FOR IGNORING BAD BEHAVIOR:

1. Discuss the behavior problem with the student and let him/her know that you are going to ignore the behavior from now on.
2. Begin to ignore the student when he/she misbehaves.
3. While ignoring the misbehaving student, praise students who are behaving.
4. Plan to ignore any misbehavior the student engages in except for violent behavior or behavior that you've already determined will be dealt with in other ways.
5. Praise student when he/she shapes up and begins to behave.
6. Teach other students to ignore misbehavior.

ADVICE FOR EFFECTIVE USE OF PRAISE:

-In response to a student's answer, be specific, wait for student to elaborate on the answer or ask another student to contribute.

-Try to avoid praising a student reluctant to participate. Instead, quietly talk to and involve the student in classroom conversation.

-Develop a positive attitude without using praise and comment specifically about student performance in relation to the task at hand, like "Now that's getting us somewhere".

B 19 SETTING GOALS FOR STUDENTS

SOURCE: Booklet Chapter: "Setting Goals for Student Behavior" in Ignoring Misbehavior and Setting Goals for Student Behavior, a booklet in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA 1971.

DESCRIPTION: Goal setting is a way to help a teacher keep on track with students by planning ahead and having a strategy in mind when misbehavior occurs. Four steps for goal-setting are outlined.

SUMMARY:

FOUR BASIC STEPS IN SETTING GOALS FOR STUDENT BEHAVIOR:

1. Determine what academic and/or social goals each student should focus on.

This should be done every month so that if a goal is achieved, a new goal can be established.

2. Put priorities on goals.

It may be impossible to achieve every goal and some students will need more help than others to achieve their goals. Therefore, the teacher needs to determine which goals should receive the most time and energy.

3. Communicate the goal or goals to each student.

As much as possible, students should know what the teacher feels they need to work on.

4. Involve the students in goal setting so that they learn to set goals for themselves.

Have students discuss goals that they would like to achieve. Help them to decide if it is long term or short term. Then have them identify a weekly or monthly classroom goal and give them feedback on their efforts.

B 20 SELF-MONITORING ACADEMIC PROGRESS

SOURCE: Excerpts (pp. 203-230) from Lovitt, T. C., Tactics for Teaching, 1984.

DESCRIPTION: Techniques of self-management can be taught to students to help them achieve in areas such as attendance, math, and story writing. Self-management techniques described in this training option are: self-recording and self-checking.

SUMMARY:

Here are two techniques of self-monitoring:

Self-Recording- This process gives the student a stake in completion of a project by:

1. Discussing with students the rationale for self-recording in developing consistent and successful work habits.
2. Defining the assignment, goals, and criteria for success.
3. Giving each student a chart on which to mark completion.
4. Adding rewards for success and accuracy of recording, if necessary.

Self-Checking- This procedure can be beneficial to teachers and students alike, giving time to teachers and skills in self-evaluation to students. Here are some steps to follow:

1. Use with written responses in which a single answer is correct (e.g. not creative writing).
2. Have students check work.
3. Check accuracy and give bonus points for accurate corrections.
4. Monitor intermittently, providing rewards and consequences for accuracy.

B 21 STUDENT SELF-MONITORING BEHAVIOR

SOURCE: Excerpt pp. 135-144 from M. M. Kerr and C. M. Nelson, Strategies For Managing Behavior Problems in the Classroom, 1983.

DESCRIPTION: Self-mediated procedures are those that put the responsibility for behavior in the hands of the student, with teacher supervision. Self-control procedures that have been shown to be successful with disruptive students include self-monitoring and self-instruction. A description and several examples are given.

SUMMARY:

Here are some steps for self-monitoring:

1. Identify target behavior with student. Include behavior to be increased (e.g.) as well as those to be decreased (e.g. talking out of turn).
2. Discuss and define behavior with student.
3. Select a practical way to measure target behavior such as using a recording sheet.
4. Train student to use measurement system.
5. Once student is self-recording behavior, check occasionally for accuracy.
6. Provide contingent rewards.

--To increase effectiveness, set small goals and gradually increase expectation.
--Provide a student/teacher matched evaluation at the beginning.

B 22 CONFERENCING

SOURCE: Two articles from Conflict in the Classroom, by N. J. Long, W. C. Morse and R. G. Newman, 1976, "Conference or Confrontation" by Sheila Murphy and "Worksheet on Life Space Interviewing for Teachers" by W. C. Morse.

DESCRIPTION: Conferences can be a very important part of a behavior management plan. Open and clear communication is the key to successful conferences with students and parents. General guidelines are given in one article and a specific technique, Life Space Interviewing, is described in another article.

SUMMARY:

FOR PARENT CONFERENCES:

1. Try to get a picture of what is happening at home so as to reach an agreement on the problem. A student's behavior may be different in different settings.
2. Don't overwhelm parents with data or jargon.
3. Listen to parents' concerns and feelings.
4. Be non-judgemental and matter-of-fact.
5. Give descriptive behavior not conclusions.
6. Try to reach some home-school agreement.

STEPS FOR STUDENT CONFERENCES BASED ON LIFE-SPACE INTERVIEWING:

1. Listen and decide if discussing this incident will benefit student.
2. Find out what is the central issue.
3. Listen non-judgementally to the student's perception of the situation.
4. Concentrate on the behavior and methods of coping.
5. Give support and emphasize skills.

--Two possible resolutions: a. Presenting the adult view of behavior and standards and b. Discussing choices for what will happen the next time.

B 23 ATTENDING TO STUDENT FEELINGS

SOURCE: 8-page handout entitled "Students Need to Belong"

DESCRIPTION: Communication and understanding are important to building a relationship through which teachers and students can work together to solve problems. Suggestions for ways to help students cope with their feelings and needs are given.

SUMMARY:

1. **Students need to belong.**- Acknowledge such things as birthdays, special trips, or accomplishments. Take time to orient a new student. Keep discipline a private matter. Accept mistakes as indication of what must be learned. Start each day with a clean slate.
2. **Students need to achieve.**- Show appreciation for non-academic as well as academic skills. Gear your teaching so that each student experiences some school-related success. Make assignments clear. Prepare students with the necessary background information and practice.
3. **Students need affection and understanding.**- Graciously accept attempts students may make to do nice things for you. Reassure students that their feelings are important and acceptable. Show that you like and accept students on an individual basis.
4. **Students need freedom from guilt.** - Look for positives and worthiness in students. Encourage students to look forward to the present and future and not to dwell on past mistakes.
5. **Students need to understand.**- Provide a classroom atmosphere where students feel free to ask questions and share ideas. Help students to see the relevance between present life, world problems, and school. Let students know that it is not necessary or possible to understand all things.
6. **Students need self-respect.**- Give responsibilities within the student's range of ability. Any small degree of success enhances self-esteem. Give frequent appraisals of student work. Encourage students to express their own ideas and make their own choices.

B 24 OBSERVING BEHAVIOR

SOURCE: Koorland, M. A., Monda, L.E., & Vail, C. D. (1988). Recording behavior with ease. Teaching Exceptional Children, Fall, 59-61.

DESCRIPTION: For some problem situations, simply observing and recording student behavior can start the process of change. Four measurement strategies that are not time-consuming, are described and suggestions given for their use.

SUMMARY:

For each of the following observation methods it is important to prepare data collection sheets, practice the method, and allow time for counting and charting data. A time-saving idea is to involve volunteers or students to help observe and record behavior.

1. Frequency/Rate:

- is counting occurrence of behavior over time.
- best for behaviors that are discrete and uniform in duration, brief and repeated.
- examples are: out of seat, touching peers, swearing, following directions.

To use: Decide on a constant counting period (like 30 minutes). Count behavior using wrist counter, grocery counter, or index card for recording tallies.

2. Duration:

- is how long a behavior lasts
- used for behavior that has a clear beginning and end
- examples are: tantrums, peer interactions, minutes tardy

To use: Count time using stop watch, or tape recorder.

3. Time Sampling:

- is a sample of behavior, occurrence at the end of an interval
- used for behavior too frequent to measure continuously
- examples are: on task behavior, pencil tapping

To use: Divide a time period into intervals (30 mins/5 minute segments). At the end of each interval, mark positive or negative occurrence. To cue recording use a tape recorder or watch alarm.

4. Permanent Product:

- are samples of student work
- examples include: number of problems completed, pages read

B 25 COOPERATIVE LEARNING

SOURCE: This packet contains two selections "Cooperative, competitive, and individualistic learning" and "Cooperative learning methods" by D. W. Johnson and R. T. Johnson, University of Minnesota. Also included are several applications of cooperative learning "A strategy for teaching cooperative games", F. Huber, in Conflict in the Classroom, by Long, Morse, and Newman, 3rd edition, 1976 and three lessons by the Johnsons: English comprehension and composition, analyzing a mystery powder in science, and using computers cooperatively.

DESCRIPTION: Cooperative learning contrasts with competitive and individualistic tasks by having students share goals and resources. Studies have shown that grouping students of mixed abilities and providing a specific structure can help inattentive or disruptive students be more successful. Two general information articles and three example lesson plans are included to give an overview of this popular and effective technique.

SUMMARY: COOPERATIVE LESSONS SHOULD INCLUDE THE FOLLOWING:

1. Lesson objectives and criteria for evaluation-- Decide how to measure group and individual mastery.
2. Form groups-- Decide whether to randomly assign or to specifically mix by sex, ability, etc.
3. Arrangements-- List materials and time needed.
4. Description of procedures: a.) Preparation, include teaching of any prerequisite skills or social skills, b.) How to grab students' interest, c.) Directions -modeling task and assigning group roles, and d.) Guided and independent practice.
5. Group processing and feedback-- Allow time for students to discuss group functioning.

THREE MODELS OF COOPERATIVE LEARNING: (please see material for more detail)

Learning Together- Groups are given a group goal. Teacher monitors group process, reviews product and checks for individual participation.

Jigsaw- A task is broken into 4 or 5 parts. One member of each group is assigned a part to study. Students pool their expertise and complete task.

Teams-Games-Tournaments- Students practice a task in groups and are assigned to tournament table to compete against other teams to score points for their team.

B 26 LET ELEMENTARY STUDENTS CHOOSE THE REWARD

SOURCE: "Article "Designing Reinforcement Surveys - Let the Student Choose the Reward", by Donna Reschke, Teaching Exceptional Children, December 1981. Two examples of surveys designed to give elementary students input on reinforcers.

DESCRIPTION: Students can choose rewards as part of contingency contracting (B15) or as a part of a teacher's overall classroom management plan. Rewards can be easy to arrange such as providing extra free time, or they can be complex, such as providing tangible rewards for certain levels of performance. Gathering student input is crucial to effective use of rewards. Guidelines for and examples of reinforcement surveys are provided.

SUMMARY:

STEPS FOR SURVEYING STUDENTS: (see materials for examples)

1. Select choices of rewards. Availability and practicality should be considered.
2. Design survey to be either open-ended, rank order, or multiple choice. Questions should be phrased positively and geared to student ability level. Pictures could be provided for non-readers.
3. Administer survey. Explain its purpose.
4. Summarize results. List most-preferred to least preferred.
5. Follow-up periodically to note any changes.

SOME COMMON REINFORCERS:

1. Knowledge of results through grading peers and own work.
2. Choosing teaching method: discussions, oral reports, movies.
3. Choosing seating arrangements, selecting partners.
4. Using magic marker, typewriter, computer.
5. Displaying work, applause from peers, call to parents.
6. Special privileges: projectionist, collecting assignments, taking role.
7. Activities such as game, freetime, etc.
8. Tangible rewards such as stars, stickers, posters, etc.
9. Edible rewards such as gum, chips, etc.

B 27 USING PEERS TO ATTAIN EDUCATIONAL GOALS

SOURCE: Excerpt pp. 12-15 from book G in The Solution Book: A Guide to Classroom Discipline by Randall Sprick, SRA, 1971.

DESCRIPTION: Most behavior interventions are teacher directed. Another influence on student behavior is the peer group. Peer influence can be utilized for attainment of educational goals through strategies described in this training option, such as peer tutoring, modeling, and reinforcement.

SUMMARY:

Consider some peer change strategies that are valuable to those who Need extra work with peers of Can Give extra help:

1. A peer can be taught to do data collection. For example, a student could time how long it takes a peer to do an assignment. Students can check and record assignment accuracy. See also B24 OBSERVING BEHAVIOR.
2. Peers can be motivated to monitor and reward each other. Students can be taught to help each other with praise, ignoring certain behavior.
3. Peers can be rewarded for appropriate behavior serving as models. Verbal praise to a student sitting near a misbehaving student can change behavior (proximity control).
4. Peer tutoring can be set up:
 - a. Design rules for peer-tutoring session.
 - b. Prepare materials for each student to use. Involve tutor in lesson planning and preparation. Tutor should learn material and be able to divide lesson into small units, sequence material and present it.
 - c. Schedule time- 15 minutes, 2-3 times per week.
 - d. Find a suitable spot: quiet, few distractions, and easy to supervise.
 - d. Assign pairs-consider ability and personality factors. Students should want to be involved and be compatible.
 - e. Teach tutors how to correct and reinforce. Tutor should learn to observe tutee during the lesson and adjust accordingly. A tutor can give positive feedback and tangible rewards with supervision.
 - f. Evaluate effectiveness of tutoring session and achievement of tutee.

B 28 CHANGING DISRUPTIVE BEHAVIOR

SOURCE: Chapter 3 in Managing Instructional Problems: A Case Study Workbook, J. Worell, C. M. Nelson, 1974.

DESCRIPTION: Deciding what is disruptive behavior requires careful observation of the effects of the behavior and teacher needs. Once a decision is made to change a disruptive behavior pattern, some options are available such as differential and intermittent reinforcements, attending to academic deficits, restructuring the classroom, and self-control resources.

SUMMARY:

A general description of disruptive behavior is given in the accompanying materials. Here are some general strategies to consider:

1. Restructure classroom- post rules, change seating arrangements, adjust curriculum.
2. Positively reinforce incompatible behavior- To help decrease talking out of turn, reward hand-raising behavior. This allows you to catch the student being good.
3. Set up a contingency contract - see B 15 CONTINGENCY CONTRACTING.
4. Set up a response cost- see B 41 RESPONSE COST.

B 29 INDIVIDUALIZED PROGRAMMING

SOURCE: Excerpt (pp. 122-125) from chapter 4 in J. Worell and C. M. Nelson, Managing Instructional Problems: A Case Study Workbook, 1974. Also excerpt (pp. 15-20) from book G in The Solution Book: A Guide to Classroom Discipline by Randall Sprick. SRA, 1971.

DESCRIPTION: Academic restructuring may help some students improve their class behavior. Individualization is one way to tailor instruction to the student's needs. Some suggestions are given for designing individual work that can make the process efficient and effective.

SUMMARY:

After assessing student abilities, analyzing the task, and writing behavioral objectives for individual assignments, follow these guidelines:

1. Have a clear set of goals for students.
2. Match materials to the student. Choose work that can be completed independently.
3. Use of variety of presentation modes and materials. Go beyond worksheets to filmstrips, tape recorders, and self-made materials.
4. Use materials that can be scored or tested objectively.
5. Develop a checking system that can be used by teacher and student.
6. Design a reinforcement component if necessary.
7. Provide a peer-tutor if needed. (See B28 USING PEERS TO ATTAIN EDUCATIONAL GOALS)
8. Allow proper amount of time: 15 minutes for primary, longer for older students.

B 30 IMPROVING SOCIAL DEFICITS

SOURCE: Chapter 5 "Improving Social Deficits" in J. Worell and C. M. Nelson, Managing Instructional Problems: A Case Study Workbook (pp.162-175), 1974.

DESCRIPTION: Students with social deficits manifest behavior like withdrawal and age inappropriate behavior. Social deficits can occur as a result of behavior deficiencies, low self-esteem, and avoidance/anxiety patterns. This training option provides several specific strategies for helping students with social deficits such as these.

SUMMARY:

STRATEGIES FOR STUDENTS WITH IMMATURE BEHAVIOR:

1. Restructure the learning task.
2. Model responses- use peer models as well.
3. Use prompts to cue desired response.
4. Shape new behavior by rewarding small steps.
5. Ignore immature behavior.

STRATEGIES FOR STUDENTS WITH LOW SELF-ESTEEM:

1. Set beginning goals low to insure success.
2. Reward early and often at first.
3. Avoid overpraising.
4. Reward successful trials after failure.
5. Focus on trying and working hard.
6. Encourage overlearning.
7. Provide opportunity for self-recording.

--In implementing strategies, be sure to determine extent of skill deficit, enlist help of colleagues who have dealt with the student, school counselors, parents, and plan and record the change efforts.

--Avoidance/anxiety behavior or social deficits that continue over a long period of time may be difficult to deal with and may require additional professional help.

B 31 MOTIVATION

SOURCE: Brophy, J. Socializing Students' Motivation to Learn. In Advances in motivation and achievement: Enhancing motivation, Volume 5 (pp181-210). JAI Press .

DESCRIPTION: Motivation to learn can be described as student attention to lessons and engagement in academic learning tasks in classrooms. Strategies to help increase student motivation are presented in two categories: 1.) strategies to establish motivation to learn and, 2.) strategies to capitalize on existing intrinsic motivation in order to make the academic tasks more enjoyable for students.

SUMMARY:

Here are some examples of strategies for motivating students:
Tap the student's interests by:

- Showing enthusiasm. Teachers can model attitudes by showing how assignments interest him/her.
- Make abstract concepts more personal, concrete, or familiar.
- Provide feedback that is quick, clear, specific, and constructive.
"Nice work on that project!"

Make the tasks enjoyable by:

- Allow students to interact with the lesson and materials as much as possible. Include activities such as projects, experiments, simulation, and role play.
- Try to present lesson like a game or include features such as challenges, puzzles, suspense, and problem solving.
- Allow students to work together in pairs or small groups (See B25 Cooperative Learning).

Motivation can be affected by general classroom atmosphere:

- Give students assignments appropriate to their abilities and encourage them to try.
- Provide assignments that have a purpose and relate the purpose to student experiences.

B 32 PRACTICING POSITIVE REINFORCEMENT

SOURCE: Mc Daniel, T. R. (1987). Practicing positive reinforcement: Ten behavior management techniques. The Clearing House, 60, 389-392.

DESCRIPTION: Effective classroom discipline is aided by positive reinforcement. Ten practical and specific principles for positive behavior management are given along with techniques for their application to classrooms.

SUMMARY: Ten Principles of Positive Behavior Management:

1. **Teach specific directions.** Students will do best when they know exactly what is expected of them. Give expectations for work and behavior that are clear, direct, and unambiguous.
2. **Look for good behavior.** Try to catch the students being good. Looking for those and praising those who are following your specific directions allows others another chance to comply.
3. **Praise effectively.** Try to describe the specific thing he or she likes about the student's behavior. "I like the way....." or "I would appreciate....." are good ways to begin praising.
4. **Model good behavior.** Teachers can model thinking processes by talking aloud or behavior by demonstration. You can set up situations and use student models for behavior.
5. **Use nonverbal reinforcement.** Facial expressions are particularly effective in communication of praise and displeasure.
6. **Establish token economies and use Grandma's rule.** Grandma said, "Eat your spinach and you can have dessert." Adapted this rule is "Finish this assignment and you will not have homework tonight." Informal and formal reward systems, like token economies (See B10), can be effective in changing behavior.
7. **Premack.** The reinforcer is in the eye of the beholder. Let the students choose the rewards (See B26, B42).
8. **Teach students to reinforce each other.** Provide students with opportunities to praise other students' performance.
9. **Teacher students to reinforce themselves.** Students can benefit from observing and complimenting themselves.
10. **Very positive reinforcement.** Use ideas generated by students and change reinforcements. Offer a surprise reinforcement or a note to students or parents.

B 33 COMMUNICATION STRATEGIES

SOURCE: Public domain materials.

DESCRIPTION: Communication is based on both talking and listening. Using active listening techniques and I-messages while talking with students may help mutual understanding. Active listening and I-messages may be useful in the seven-step problem solving method described or in non-conflict situations.

SUMMARY:

Techniques for Active Listening:

- Have a purpose in listening.
- Exhibit sincere interest in ideas being communicated.
- Give undivided attention to what is said.
- Keep an open mind.
- Start your responses with words like:
 - "I guess you want/wish/feel is"
 - "I'm not sure I understand. Do you mean you're disappointed?"

Using I-Messages: Use of messages that don't blame a student, but refer to the teacher's impression of a problem avoid roadblocks in communication. I-messages have three components:

1. behavior in question
2. effects behavior has on you
3. your feelings about behavior and its effects

Example: "I resent it when you leave toys lying around on the floor because I have to pick them up afterwards."

I-messages can be used for positive behavior as well: "Your drawing has my favorite colors. I feel peaceful just looking at it."

7-Stage Problem Solving Method:

1. Set the stage-Describe problem using I-messages.
2. Define problem in terms of needs rather than competing solutions.
3. Generate solutions from everyone involved.
4. Evaluate alternatives, summarized what is agreed on.
5. Find mutually acceptable solutions, write solution down. If consensus can't be reached, agree to meet again.
6. Implement solution.
7. Evaluate, initial solution may not last forever.

B 34 INCREASING ATTENTIVENESS, DECREASING WITHDRAWAL

SOURCE: Chapter 2, in M.S. Swift and G. Spivack, Alternative Teaching Strategies: Helping Behaviorally Troubled Children Achieve, 1975.

DESCRIPTION: Students act inattentive and withdrawn for physical, situational, and emotional reasons. Strategies for encouraging such students include: relating assignments to the student's interests, giving short, clear instructions, responding to and rewarding attending behaviors, and involving the student in the task by self-recording activities and attending behaviors.

SUMMARY:

Some strategies for increasing student attention are:

To get student's attention:

- Pause after asking question, look at different students before calling on anyone.
- Call on students in a random order. Let them know that you may call on anyone.
- Create a level of uncertainty by asking what would happen next or how will something end.
- Move closer to inattentive student.
- Point out in his/her book while continuing to talk to class.
- Alert the student what to listen for.
- Alert the student that he/she will be called on.
- Give short, clear instructions.

To keep student's attention:

- Break long assignments into short tasks. Ask to see intermediate products.
- Gradually lengthen longer work sessions.
- Use manipulative materials when possible.
- Involve the student in a special role or task.
- Use praise to indicate success in attending or improvement of attention.
- Talk to student privately about good attending behavior.
- Have student record his/her own efforts to attend.
- Have student record length of time needed to complete assignments.

B 35 MEETING NEEDS OF RESTLESS, SOCIALLY OVERINVOLVED STUDENT

SOURCE: Chapter 10 in M.S. Swift and G. Spivack, Alternative Teaching Strategies: Helping Behaviorally Trouble Children Achieve, 1975.

DESCRIPTION: Some strategies that have proven effective with restless students include: 1.) legitimizing energy release, 2.) clarifying and articulating teacher expectations, 3.) signaling the student in several ways, 4.) selective use of attention, 5.) reprimanding, 6.) using physical placement in the classroom, 7.) capitalizing on social motivation by involving the student in group activities, 8.) using student self-monitoring techniques, and 9) contracting. Steps are outlined for each of these strategies.

SUMMARY: STRATEGIES FOR RESTLESS STUDENTS:

Provide energy release:

- Ignore as an initial response (See B 18 Praise Good Behavior and Ignore Bad Behavior).
- Include skits, stories that involve movement and noisemaking. Provide a stretch break.
- Give restless student jobs around the class that involve movement like handing out papers or taking attendance.

Clarify the problem:

- Discuss the situation with student. Give your impression and find out how student perceives his/her behavior in a specific situation.
- Have student write why he/she acts a certain way.

Other strategies:

- Praise student when he/she starts to comply. For example, comment on a student's getting a book out or is on the correct page. Attend to appropriate behavior.
- Use soft and personal reprimands.
- Use mild punishment such as writing student's name on board and marking disruptive incidents.
- Use physical placement in the class. Seat two disruptive students together and reward one and the other may learn also. Temporarily isolate disruptive student with independent work.
- Capitalize on social motivation by allowing student to tutor classmates, providing projects to do, and allowing student to voice opinions in group discussions.

B36 SOCIAL SKILLS STRATEGIES

SOURCE: Excerpt, pp. 186-196, in M.M. Kerr and C.M. Nelson, Strategies for Managing Behavior Problems in the Classroom, 1983.

DESCRIPTION: Intervention to increase the social skills of children can create behavior change. Successful strategies include: 1) teacher prompting and reinforcement, 2) peer imitation training, 3) peer prompting and reinforcement, 4) peer coaching in social skills, 5) cooperative academic tasks, and 6) self-management approaches.

SUMMARY:

Strategies for Primary Students:

1. Choose cooperative play materials like dolls, toy telephones, puppets versus toys like puzzles, paints, and books.
2. Provide enough materials to enable children to participate.
3. Provide adult support to assist children in starting and completing activities.
4. Select activities that involve several children like make-believe, rough and tumble play.
5. Provide prompts to withdrawn child like: "Why don't you see if Johnny wants to play?", or "Hand Tommy the truck." or "Help Kathy with the clay."
6. Provide verbal reinforcement when child participates.

Strategies for Elementary and Middle School:

1. Modify group games to be non-competitive. For example in Simon says don't eliminate players or compete against the teacher. In volleyball, see how many times players can keep the ball in the air.
2. Work with counselor or psychologist to teach a student relaxation and anxiety reduction strategies.
3. Use peers to model social behaviors and work with a withdrawn student. Help peers to prompt and reinforce a withdrawn student.

Strategies for Older students:

1. Use adult or peer involved role playing of appropriate social skills. This can be as simple as modeling a greeting or interview situation.
2. Provide cooperative academic tasks (See B 25).
3. Have students self-monitor behavior (See B 21).

CAUTION: Punishment and isolation should be avoided with withdrawn students. Withdrawn students often need to learn and practice social skills and punishment or isolation makes this learning more difficult.

B37 SELF-CONTROL TRAINING

SOURCE: Two articles from a special edition of Behavior Disorders, Vol. 4, 1979, "A psychoeducational curriculum approach to teaching self-control" by S.A. Fagen and J.J. Long (pp. 68-82) and "Self-control: Methods for child training" by L. Polsgrove (pp. 116-130).

DESCRIPTION: Training students in self-instruction and cognitive self-control have been found to have an effect on preventing and managing behavior problems. Checklists of skills and examples of training are provided.

SUMMARY:

Self-Management Methods:

Self-Monitoring

Students can be trained to record desired behavior using 3 guidelines:

1. Use for behaviors the student can accomplish.
2. Have students record both desired and undesired behavior at the same time (like sitting in seat and getting out of seat).
3. Have students use all the time at first and then less often.

Contingency Contracting

Students can gain self-control by having input into rewards, selecting behavior to change, and monitoring progress under conditions of a contract (See B15 CONTINGENCY CONTRACTING)

Self-Evaluation and Reinforcement

After a student's behavior has shown improvement in a teacher-directed reward system, some students can evaluate their progress and implement reinforcement.

Cognitive Methods:

Self-Instruction

Students use self-talk to guide their performance. Some steps to follow are: select easy tasks at first, teach students to break tasks down into small steps, teach students to undertake tasks stepwise, model instructions, coping, relaxation, and reinforcing self-statements.

Problem Solving

Directly teach effective problem solving. Five phases have been identified: orientation, problem definition, generation of alternative solutions, decision-making, and verification.

B38 SCHOOL-HOME MOTIVATION

SOURCE: Study entitled "The elimination of discipline problems through a combined school-home motivational system" by T. Ayllon, S. Garber, and K. Pisor, in Behavior Therapy, 6, pp. 616-626.

DESCRIPTION: Combining efforts of school and home to reinforce appropriate behavior of students can be very effective. The experimental procedure in this study involved sending a letter home for good behavior and parents providing reinforcement accordingly. Within one day the disruptive behavior of 23 third graders went from constituting 90 percent of the observed time to 10 percent of the observed time. Principles from the study can be applied to most classroom situations.

SUMMARY: Some suggestions on the use of school-home reinforcement are as follows:

1. Parents need to be given some training in the management of home-based reward systems for their child. Consistency and follow-through should be emphasized.
2. The communication system with the parents should be convenient and reliable. The system must take into account that a student may withhold a negative report. In this case no report was assumed to be negative.
3. Good reports home should be based on in school behavior, piggy-backing on existing classroom reinforcement systems. The good reports should be attainable and consistently rewarded at school.

B39 ORGANIZING PLAYTIMES FOR PRIMARY STUDENTS

SOURCE: Excerpt from Mainstreaming preschoolers: Children with emotional disturbance, by Project Head Start, 1978.

DESCRIPTION: Outdoor play, free play, trips and other events can be difficult for students who have behavior problems. But these times can provide valuable opportunities for social skill, cognitive skill, and motor skill development. Nine suggestions are included for organizing activities to maximize success.

SUMMARY:

1. Be Prepared.

Outdoor play: Examine play area for dangerous spots or items in disrepair. Know which children have difficulty in open areas. Play some simple games with varying degrees of structure and competitiveness. Work out a system for sharing the equipment.

Free play: Gather all materials. Have a system for passing out materials, sharing and taking turns. Know the relative difficulty level of each activity so that children won't get mismatched and frustrated.

Trips and Other Special Events: Visit the site to see what kind of problems there might be. Plan transportation so that there is little waiting time. Prepare the students by describing what they will see and do on the trip and check their understanding.

2. Conduct the Activity.

Outdoor play: Allow time for dressing. Explain rules before going outside. Observe the activity closely with more adult help if possible. Be attentive to the children and not to the other adults.

Free play: Help the children get started. New materials should be demonstrated. Take some time with individuals, but don't interfere with a child doing well on his/her own. Be alert for sounds of difficulty. Give the students warning for ending the activity.

Trips and Other Special Events: Check to see everyone has a nametag. At the site, ask the children questions about what they see and encourage them to ask you questions. Review the trip when you return.

B39 cont.

3. Intervene when Needed.

Outdoor play: Don't hesitate to slow down an aggressive child. For example, ask him/her to crawl like a turtle or have the child sit down for 20-30 seconds. Have an anxious child walk with you and gradually involve him/her in a quiet game with a couple of children.

Free play: Give extra help to those who need it to get started. Your attention can help a child focus his/her attention.

Trips and Other Special Events: Keep a distractable child close and within verbal control. Don't force an anxious child to go on a trip. Keep a constant check on a wandering child.

B40 SKILLSTREAMING FOR ADOLESCENTS

SOURCE: Chapter 3 and chapter 5 from Skillstreaming the adolescent: A structured learning approach to teaching prosocial skills, by A. Goldstein, R. Sprafkin, N.J. Gershaw, and P. Klein, 1980.

DESCRIPTION: Skillstreaming is a social skills curriculum and teaching method that relies on using a group approach with modeling and role playing of social skills. A detailed explanation of techniques and lists of skills are provided.

SUMMARY: Role-playing and feedback activities make up social skills training where behaviors are first rehearsed and then critiqued. Small groups of students (6-8) should be involved at one time. Several components of this training are outlined.

1. Trainer preparation:

Adults involved in social skill training should have an overall view of social skills and knowledge of training techniques. See accompanying materials for more information.

2. Trainee preparation:

Students should be given a picture of what they will be doing in group sessions and how it will benefit them.

3. Setting and opening session:

The setting should be as close as possible to classroom or work environment. The opening session may include a warm-up time and should be planned to be interesting and non-threatening to students.

4. Modeling:

All of the steps making up a skill should be modeled in the correct sequence. Modeling activities should be planned carefully, and should show at least two situations. Usually live vignettes are used that involve the trainer and another person.

5. Role-playing:

Discussion should focus on relating the modeled skill to the lives of the students. A student that describes a situation in his/her own life becomes the main actor. Another participant is chosen and a scene is acted out with the main actor enacting behavioral steps that have been modeled.

Included in the accompanying materials are 50 social skills such as listening, asking for help, making a decision.

B41 RESPONSE COST

SOURCE: Alberto, P. A. & Troutman, A. C. (1986). Applied behavior analysis for teachers, 2nd Edition. (pp. 246-248). Columbus, OH: Merrill.

DESCRIPTION: Response cost is a technique designed to reduce misbehavior through removal of reinforcers. It is often used in conjunction with token systems or contingency contracts. Guidelines and cautions for the use of response cost are provided.

SUMMARY:

Response Cost is used like a system of fines. Examples are subtracting minutes late from free time or reduction of grades. The cost must be related to a reward given (e.g. free time or passing grades). Reinforcement systems may change behavior without a response cost feature.

GUIDELINES FOR USING RESPONSE COST:

1. Consider using positive procedures first such as rewards for good behavior. (See B 1 PRINCIPLES OF REINFORCEMENT).
2. Develop a pool of rewards for students (See B 26 LET STUDENTS CHOOSE THE REWARD).
3. Describe appropriate behavior and fines for misbehavior.
4. Choose the size of the fine for each instance of behavior very carefully. It is important to balance the cost and payments.
5. Make sure the reinforcers can be retrieved.

CAUTION:

Points given are easier to withdraw than tangible (especially edible) rewards. Consider the severity of fines and what will happen when all points are lost.

B 42 LET SECONDARY STUDENTS CHOOSE THE REWARD

SOURCE: "Article "Designing Reinforcement Surveys - Let the Student Choose the Reward", by Donna Reschke, Teaching Exceptional Children, December 1981. Two examples of surveys designed to give elementary students input on reinforcers.

DESCRIPTION: Students can choose rewards as part of contingency contracting (B15) or as a part of a teacher's overall classroom management plan. Rewards can be easy to arrange such as providing extra free time, or they can be complex, such as providing tangible rewards for certain levels of performance. Gathering student input is crucial to effective use of rewards. Guidelines for and examples of reinforcement surveys are provided.

SUMMARY:

STEPS FOR SURVEYING STUDENTS: (see materials for examples)

1. Select choices of rewards. Availability and practicality should be considered.
2. Design survey to be either open-ended, rank order, or multiple choice. Questions should be phrased positively and geared to student ability level.
3. Administer survey. Explain its purpose.
4. Summarize results. List most-preferred to least preferred.
5. Follow-up periodically to note any changes.

SOME COMMON REINFORCERS:

1. Knowledge of results through grading peers and own work.
2. Choosing teaching method: discussions, oral reports, movies.
3. Choosing seating arrangements, selecting partners.
4. Using typewriter, computer.
5. Displaying work, applause from peers, call to parents.
6. Special privileges: collecting assignments, taking role.
7. Activities such as game, freetime, etc.
8. Tangible rewards such as posters, extra credit, etc.
9. Edible rewards such as gum, chips, etc.

B 43 TEACHING SOCIAL COMMUNICATION SKILLS

SOURCE: Certledge, G. & Kleeefeld, J. (1989). Teaching social communication skills to elementary school students with handicaps. Teaching Exceptional Children, 21, p. 14-17.

DESCRIPTION: Social communication is a class of behaviors such as greeting, participating in a group, following rules that is important in relating to peers and teachers. This use of language to achieve social goals is outlined in steps of a skills training model.

SUMMARY: Instructional Model

1. Assessing Social Communication Skills

It is important to determine what behaviors are to be taught and skills or set of skills should be targeted. Observe the student or students informally in natural settings to see how they behave in everyday situations. Example skills and responses are listed on a skills checklist given on page 16 to use in assessing students.

2. Teaching Social Communication Skills

a. Provide a rationale to motivate student performance.

Students need to develop an interest in performing target skill. The teacher may use simple stories and/or puppets to enact a problem situation.

b. Model the behavior to demonstrate the skill.

The teacher can role play or use a puppet to model the desired behavior. Then the teacher can ask each student to repeat the skill. This instruction can take place continuously throughout the day.

c. Practice the skill.

Following the modeling, students should have the opportunity to practice and role-play. Students can use puppets also. The teacher can observe and prompt the students.

3. Providing for Maintenance and Generalization

Activities can be planned which help the student use target skills in a variety of situations. These activities can be in the form of typical classroom activities such as: games, bulletin board displays, work sheets and role plays throughout the day.

B 44 LEARNING STATIONS

SOURCE: Wood, J.N. (1984). Adapting Instruction for the mainstream. Columbus, OH: Merrill.

DESCRIPTION: Learning stations can be set up in classrooms to provide a way to individualize instruction and to meet specific educational objectives. Used mostly in elementary classrooms, learning centers may serve similar goals in secondary settings.

SUMMARY:

There are three types of learning centers:

1. **Acquisition-** This center is designed to teach new skills. Directions can be on 3 by 5 cards or given by tape recorder or student assistants. Some strategies to consider in teaching are: breaking skills into parts, providing 10-15 minutes of practice (to to a set mastery level), providing instant feedback in the form of overlays, puzzles, or self-checking sheets, varying materials, presenting material orally and visually, organizing material with a flowchart or skills checklist.
2. **Retention-** This center is designed to help students remember previously taught material. Four strategies for retention are: overlearning with numerous activities for practice, varying type of retention from recognition (multiple-choice) to recall (name or list items), giving clues to retention, and giving short check-up tests.
3. **Transfer-** Activities in this center help the student apply skills to similar tasks and to different situations through practice and overlearning.

Six Criteria for Learning Centers:

1. Each student should learn skills, facts, and/or large ideas.
2. Students should be challenged, interested in activities.
3. Students should be prepared for material presented.
4. There should be practical time limits.
5. There should be clear directions and standards for success.

B 45 GRADING

SOURCE: Kinnison, L.R., Hayes, C. & Acord, J. (1981). Evaluating student progress in mainstream classes. Teaching Exceptional Children, 13, p. 97-99. Cohen, S.B. (1982). Assigning report card grades to the mainstreamed child. Teaching Exceptional Children, 14, p. 86-89.

DESCRIPTION: In addition to their evaluative function, grades can be a useful motivator for students. Combining letter grades or scores with descriptive performance feedback and modifying grading systems are options that teachers may want to consider.

SUMMARY:

SUGGESTIONS FOR GRADING:

1. When giving non-corrective feedback such as frequency counts, scores, percentages use wrong-only feedback that allows students to focus on and correct errors.
2. Use corrective feedback on daily assignments to provide information and error analysis.
3. Use a combination of 1. and 2. on tests.
4. When reporting grades, include notes and written comments. Emphasize intra-student progress and assessment.

VARIATIONS IN GRADING:

1. **MASTERY LEVEL-** Set criteria for specific steps and objectives. Grade according to progress from assessed beginning to mastery levels.
2. **STUDENT SELF-COMPARISON-** Measure individual student progress.
3. **CONTRACTING-** Agree on specific activities and levels of performance with individuals or groups of students.
4. **MULTIPLE GRADES-** Give grades for Ability, Effort, and Achievement.
5. **SHARED GRADING-** Combine a grade between two teachers.
6. **POINT SYSTEM-** Give points for specific activities, added for a total grade.
7. **EXTRA CREDIT AND PROJECT OPTIONS-** Plan variations for added work to improve grades.

B 46 MANAGING THE ASSIGNMENT

SOURCE: Wood, J. W. (1984). Adapting Instruction for the Mainstream. Columbus: Merrill.

DESCRIPTION: When students display poor organization skills, teachers sometimes need to look at factors related to the assignments themselves as well as to student behavior. Inappropriate behavior may be symptomatic of a poor fit with the assignment. This teaching activity gives teachers guidelines for looking at assignment directions, difficulty level, and adapting assignments and materials.

SUMMARY:

Assignment Directions: Are directions stated in a way that all students can understand them? Never assume that everyone hears or sees the directions; observe behavior at the beginning of the task. Make directions clear and simple. Present directions orally and visually. Have a selected place on the board for directions. Get total class attention before giving directions. Give directions one at a time. Check student comprehension of directions. Encourage students to do a good job.

Assignment Difficulty: When an assignment seems too difficult for a handicapped student, try one or more of the following:

1. Reduce the amount of work.
2. Adapt the assignment to reduce the difficulty.
3. Break the task down into small sequential steps.
4. Start teaching at the first step in a sequence of steps.
5. Do not assume that the handicapped student has copied assignment correctly.
6. Make copies of assignments for the week to give to the student and to the resource teacher.

Adapting the Assignment. Follow these steps:

1. Assess for the appropriate instructional level.
2. Use feedback from the assessment to plan adaptations.
3. Use assignments as ongoing parts of all types of classwork.
4. Consistently modify teaching techniques and media.
5. Relate all tasks to the assignment objectives.
6. Make tasks sequential.
7. Break assignments down into small increments.
8. Use short, rather than long, practice periods for skills.
9. Begin all assignments with a purpose; involve students.
10. Orient students to major points of the assignment.
11. Announce when time for assignment is nearly completed.

B 46 CONT.

12. Do not punish handicapped students by having them complete work during break time or after school.

Adopting Materials. Ask these questions during selection:

1. Is it a match for students' instructional level? Learning style? Interests? IEP objectives? Is it sequential?
2. Does it insult students' dignity?
3. Does it have several evaluation steps? Support materials?
4. Is it compatible with teaching method, styles, approach?

B 47 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS

SOURCE: Fagen, S. A., Graves, D. L., & Tessler-Switlick, D. (ND). Promoting Successful Mainstreaming: Reasonable Classroom Accommodations for Learning Disabled Students. Rockville, MD: Montgomery County Public Schools.

DESCRIPTION: Often accommodations are necessary to enable students to perform to the best of their abilities, and often poor organizational behavior is at the core of their problem. This teaching activity lists accommodations teachers have found to be effective with students.

SUMMARY:

See teaching activity B47 for lists of accommodations in these areas:

- All Subject Areas
- Reading/Literature
- Spelling/Writing
- Social Studies/Science

Accommodations which are the easiest for the teacher to implement are marked with an asterisk (*).

All accommodations are recommended for all grade levels, unless marked "ELEMENTARY" or "SECONDARY".

B 48 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING

SOURCE: Costa, A. L. (). Teacher behaviors that enable student thinking. In Developing minds: A resource book for teaching thinking p. 125-137.

DESCRIPTION: A student engaged in a lesson is less likely to be disruptive and more likely to profit from the teaching. Four categories of teacher behavior that have been demonstrated to influence student achievement and involvement by inviting, maintaining, and enhancing students' thinking are described.

SUMMARY:

1. **Questioning.** Consider and vary question types.
 - a. **INPUT-** questions that require information from students and include tasks such as: NAMING, COUNTING, MATCHING, LISTING, DEFINING, and IDENTIFYING.
 - b. **PROCESS-** questions that require students to relate concepts by: EXPLAINING, CONTRASTING, COMPARING, and SEQUENCING.
 - c. **OUTPUT-** questions that require students to apply concepts by: SPECULATING, EVALUATING, and JUDGING.
2. **Structuring Classroom.** Teachers should make students responsible for thinking throughout the school day during individual, group and total group lessons using these strategies:
 - a. **REVIEWING**
 - b. **REPEATING CONCEPTS**
 - c. **PREPARING FOR NEXT TOPICS**
 - d. **ALLOWING STUDENTS TIME TO THINK BEFORE RESPONDING**
 - e. **USING VISUAL AND VERBAL EXAMPLES**
 - f. **PROVIDING ACTIVE SUPERVISION**
 - g. **PROMOTING DEBATE AND PROBLEM SOLVING**
3. **Responses.** Teachers should avoid closed responses (criticism or overused praise) that and use open responses (silence, accepting, clarifying, and adding data) that extend student participation.
4. **Modeling Cognition.** Teachers can think aloud and model problem-solving behavior.

B 49 THINK PAIR SHARE

SOURCE: Lyman, F., Student Teacher coordinator at the Southern Teacher Education Center, unpublished manuscript, Howard County, MD.

DESCRIPTION: Think-Pair-Share is a strategy developed to encourage student participation in the classroom. Students are taught to use a new response cycle in answering questions. The technique is simple to learn and is applicable across all grade levels, disciplines, and group sizes.

SUMMARY: THE COMPONENTS OF THINK-PAIR-SHARE:

- *Students listen while teacher poses a question.
- *Students are given time in which to think of a response.
- *Students are then sometimes cued to pair with a neighbor and discuss their responses.
- *Finally, students are invited to share their responses with the whole group.

A time limit is set for each step in the process. Many teachers use cueing devices such as bells, pointers, hand signals, or cubes to move students through the cycle.

Benefits to students:

Students have time to at least think through their own answers to questions before questions are answered and discussion moves on. They rehearse responses mentally, and sometimes verbally with another student before being asked to respond publicly. All students have an opportunity to share their thinking with at least one other student, thereby increasing their sense of involvement.

Benefits to teachers:

Students have been found to spend more time on task and to listen to each other more when engaged in Think-Pair-Share activities. Many more students raise their hands to respond after rehearsing in pairs. Students may have better recall due to increased "wait time" and quality of responses may be better.

Like students, teacher also have more time to think when using Think-Pair-Share. They can concentrate on asking higher-order questions, observing student reactions, and listening to students.

B 50 SOCIAL SKILLS CURRICULUM ANALYSIS

SOURCE: Carter, J. & Sugai, G. (1989). Social skills curriculum analysis. Teaching Exceptional Children, 22, p.36-39.

DESCRIPTION: There are many social skills curriculum packages available. When selecting what curriculum to use, one should consider the aspects of assessment, what strategies to implement, and measurement of effects on student performance. Practical considerations, instructional strategies, and a list of popular programs are presented.

SUMMARY:

When evaluating a social skills curriculum ask these questions:

1. Are assessment procedures/instruments included?
2. Is the curriculum adaptable to individual needs?
3. Can the curriculum be used with small groups? Groups of 3-6 are best for providing peer feedback and modeling.
4. Can personnel implement the curriculum without specialized training beyond that described in the curriculum? Other teachers, professionals, and/or parents can provide training.
5. Is the cost of implementation reasonable and manageable?
6. Is field test information provided and convincing? Field test the curriculum yourself before ordering.
7. Are strategies included that will promote maintenance and generalization of skills to a variety of settings?

Consider instructional strategies:

Table 1 in the article provided describes and lists advantages and disadvantages of commonly used strategies to teach social skills: Modeling, Strategic placement, Instruction, Correspondence training, Rehearsal and practice, Positive reinforcement or shaping, Prompting and coaching, and positive practice.

References are given for 9 curricula on page 39.

B 50 SOCIAL SKILLS CURRICULUM ANALYSIS

SOURCE: Carter, J. & Sugai, G. (1989). Social skills curriculum analysis. Teaching Exceptional Children, 22, p.36-39.

DESCRIPTION: There are many social skills curriculum packages available. When selecting what curriculum to use, one should consider the aspects of assessment, what strategies to implement, and measurement of effects on student performance. Practical considerations, instructional strategies, and a list of popular programs are presented.

SUMMARY:

When evaluating a social skills curriculum ask these questions:

1. Are assessment procedures/instruments included?
2. Is the curriculum adaptable to individual needs?
3. Can the curriculum be used with small groups? Groups of 3-6 are best for providing peer feedback and modeling.
4. Can personnel implement the curriculum without specialized training beyond that described in the curriculum? Other teachers, professionals, and/or parents can provide training.
5. Is the cost of implementation reasonable and manageable?
6. Is field test information provided and convincing? Field test the curriculum yourself before ordering.
7. Are strategies included that will promote maintenance and generalization of skills to a variety of settings?

Consider instructional strategies:

Table 1 in the article provided describes and lists advantages and disadvantages of commonly used strategies to teach social skills: Modeling, Strategic placement, Instruction, Correspondence training, Rehearsal and practice, Positive reinforcement or shaping, Prompting and coaching, and positive practice.

References are given for 9 curricula on page 39.

B 53 FIVE TEACHING STRATEGIES

SOURCE: Jackson, N. F. , Jackson, D. A. , & Monroe, C. (1983). Getting along with others. Teaching social effectiveness to children Champaign, IL: Research Press.

DESCRIPTION: Five teaching strategies are described as important to a positive classroom atmosphere in which appropriate student behavior is elicited or strengthened. Use of the five strategies: positive feedback, ignore-attend-praise, teaching interaction, direct prompt, and sit and watch, may make teaching social skills and other subjects easier and more rewarding.

SUMMARY: Five Teaching Strategies

Provide opportunity for occurrence of appropriate social skills and positive feedback from the teacher. The strategies form a continuum from least invasive (positive feedback) to most restrictive (sit & watch) in their application to specific behavior problems.

1. Positive Feedback

Positive feedback is: positive, true, specific to the behavior, and given immediately after the appropriate behavior.

2. Ignore-Attend-Praise

Ignore misbehaving student. Attend and praise a student who is behaving appropriately. Praise student when misbehavior changes.

3. Teaching Interaction

Teacher interrupts misbehavior by saying something positive related to the situation to get the students attention. Then teacher asks child or models an alternative behavior. To follow-up, the teacher asks the student to practice, and praises successful practice. This intervention is best used in a situation when the teacher can concentrate on one or two students.

4. Direct Prompt

With a direct prompt given calmly and with eye contact, the teacher tells the student exactly what he or she should be doing. The statement should be brief and neutral. Use when Ignore-Attend-Praise is not effective and follow-up with attention and praise. If student does not respond to direct prompts, use Sit & Watch.

5. Sit & Watch

This is a time-out procedure where a non-compliant student is removed from the group for 2 minutes. Praise appropriate behavior in ear-shot of the misbehaving student. When the time is up, praise the student for sitting and watching, have the student name the inappropriate behavior, and appropriate behavior. When the student is back in the group, watch for the changed behavior and reinforce quickly.

B 51 PROBLEM-SOLVING

SOURCE: Solutions Unlimited. Available at Howard County Staff Development Center

DESCRIPTION: Solutions Unlimited is a multimedia (computer, video, worksheet) program in which several problem-solving strategies are presented. Each unit consists of a video lesson and computer application. Emphasis is on breaking strategies into steps that are easy to remember and using the steps in practical applications. Eight units are described and reviewed.

SUMMARY: Units and Strategies

1. Hey Wait! Think, See, So?

This introductory unit described a four-step problem-solving strategy.

2. Plan Ahead

In this unit, a three-step strategy for time management that includes List-Schedule-Review is developed in school and personal applications. **Reviewed positively.

3. The Whitewater Canoe Race

In this unit the students practice the THINK in Think, See, So by learning to consider alternatives when problem-solving. **Reviewed positively.

4. Letters From the Past

In this unit students learn how to communicate in writing, "What to say" and "How to say it". Students use word processing in the computer application.

5. Saving Energy

This unit consists of using graphics when problem-solving as an aid to visualizing problems.

6. Who Says So?

This unit presents information on using sources of information. Searching data-bases is dealt with in the computer application. **Reviewed positively.

7. I Know Enough

In this unit, students learn how to decide when to draw a conclusion when problem-solving. **Reviewed positively.

8. Survival

A wilderness survival simulation designed as a follow-up to lessons 1-7 or independently.

B 54 THINK ALOUD

SOURCE: Besh, M. S., & Camp, B. W. (1985). Think Aloud. Champaign, IL: Research Press.

DESCRIPTION: Verbal mediation (thinking aloud to guide problem solving) has proven to be an effective strategy for solving academic and social problems. Think Aloud program for improving social skills includes five specific skills for teachers that facilitate student use of verbal mediation.

SUMMARY: Specific Skills for Teachers:

1. Cognitive Modeling

Teacher models verbalization for problem solving for students. This requires that the teacher attempt the task before the students and is able then to clearly state possible obstacles and how to overcome them. This is not just giving directions to a task, but outlining thinking strategies.

2. Requiring students to ask themselves four self-instructional questions

1. What am I supposed to do?
2. What are some plans?
3. How is my plan working?
4. How did I do?

Lessons for teaching the four questions are included in the Think Aloud program. Students must learn to ask themselves the four questions and answer them appropriately.

3. Allowing students time to formulate their own answers

Teachers should give students at least five seconds to answer questions, gradually becoming comfortable with longer intervals-as long as necessary for students to organize their thoughts.

4. Introducing evaluation at the right time

Students learn to evaluate themselves by using four evaluative criteria: safety, how it makes you and others feel, fairness, and effectiveness. Teachers' praise should follow a student's own evaluation.

5. Using alternative thinking

Teachers can encourage multiple answers by responding neutrally with statements such as "That's one idea" instead of "That's a good idea."

Text Version of the Learning Strategy Selector Knowledge Base (LRNSEL)

The following listing of the Learning Strategy Selector knowledge base is provided for readers who are interested in expert system design or who wish to modify or adapt the knowledge base. This knowledge base conforms to the syntactical and structural rules for version 2.5 of the HT subsystem of KES (Software Architecture and Engineering).

\LRNSEL Learning Strategy Selector
\Developed using KES HT (version 2.5.2) expert system shell
\from Software Architecture and Engineering, 13100 Worldgate Drive,
\Suite 340, Herndon, VA 22070-4382 (703) 318-1000

\ INPUT ATTRIBUTES

text:

{Cover:

*** **

" LEARNING STRATEGY SELECTOR",

" By Virginia H. Pilato and David B. Malouf ",

"Developed by the SNAP System Project, Institute for the Study",
"of Exceptional Children and Youth, University of Maryland-- ",
"College Park, MD, 20742.",

"Developed with KES HT software, Software Architecture and ",
"Engineering, Inc. Arlington VA.",

"This product was developed under grant GOO8730016 from the ",
"United States Department of Education. However, the contents",
"do not necessarily reflect the policy of the Department of ",
"Education, and no official endorsement should be inferred. ",

"Last update: June 1991."

{Credit:

*** **

" PLEASE NOTE:",

" The KES runtime software and license for the SNAP",
" System have been provided without charge by Software",
" Architecture and Engineering, 13100 Worldgate Drive,",
" Suite 340, Herndon VA 22070-4382.",

" The following conditions apply to the use of this",
" software and license:",

- " 1. Distribution is limited to this application (SNAP System).",
- " 2. Distribution is limited to educational institutions.",
- " 3. No portion of the KES development system is included in",
" this distribution.",
- " 4. This distribution does NOT include any support from Software",
" Architecture and Engineering to SNAP System users.",

***}

%

attributes:

seeagain:sgl

(yes,no)

{question:

"Would you like to look at the list of suggested materials again?" , "" ,

"You may see the list and descriptions as many times as you want." , "" ,

"Answer YES if you want to obtain a printout." , "" }.

doagain:sgl

(repeat

{question: "Repeat the Learning Strategy Selector."},

quit

{question: "Leave the Learning Strategy Selector and return to",

" the main menu."})

{question:

"What would you like to do now?"}.

mg1: sgl

(yes, no)

{question:

" Do you want to consult with the computer regarding the VERBAL "

" PERFORMANCE of your students? This includes the areas of:",

" listening, ",
" speaking, ",
" reading, ",
" writing, and ",
" thinking skills." ,

" " }.

mg2: sgl

(yes, no)

{question:

" Do you want to consult with the computer regarding the ",

" MATHEMATICS PERFORMANCE of your students?" }.

mg3: sgl

(yes, no)

{question:

" Do you want to consult the computer regarding GENERAL LEARNING ",
" for your students with special needs?" ,

" This category may be appropriate if you have one or more",
" students experiencing difficulties in learning or in",
" classroom performance and if your concern is NOT limited",

" to VERBAL PERFORMANCE or MATHEMATICS.",
 ""
 " This category includes materials related to classroom",
 " interactions, classroom organization, and accommodations",
 " for students with special needs.",
 ""}.

sg1: sgl

(G1

{question: "Improve student skills and motivation in one or more",
 " areas of verbal performance."},

G2

{question: "Adjust instruction to minimize the impact of poor verbal",
 " skills, for example, tape recording text material so that students",
 " with poor reading skills can learn the material."},

G3

{question: "Learn more about student performance by using appropriate",
 " diagnostic procedures."})

{question:

***** Select ONE goal *****
 "Select one goal which best describes a concern you",
 "have."}.

sg2: sgl

(G4

{question: "Improve student mathematics skills."},

G5

{question: "Adjust instruction to minimize the impact of poor",
 " mathematics skills, for example, putting problems on graph paper",
 " to help students line up the numbers."},

G6

{question: "Learn more about student performance by using appropriate",
 " diagnostic procedures."})

{question:

***** Select ONE goal *****
 "Select one goal which best describes a concern you",
 "have."}.

sg3: sgl

(G7

{question: "Improve student basic learning skills. This goal includes",
 " training activities in the areas of:",
 " "
 " increasing student involvement",
 " motivation of goal directed performance, and",
 " enhancing student thinking.",

"}
G8

{question: "Make classroom accommodations for students with special",
" needs. This goal includes training activities in the areas of:"

" "
" adaptations for special needs, such as grading,"
" classroom organization, and",
" reducing problems due to poor organization skills."

"}
G9

{question: "Learn more about student performance by using appropriate",
" diagnostic procedures."})

{question:

.....

***** Select ONE goal *****

"Select one goal which best describes a concern you have."}

goals: sgl

(G1,G2,G3,G4,G5,G6,G7,G8,G9).

want: sgl

(yes, no)

{question:

.....

" Would you like to see a short description of the selected teaching",
" techniques?"

""

" Responding YES by entering the number 1 will give you",
" descriptions of each of technique."

""

" Responding NO by entering the number 2 will continue",
" this consultation without giving you technique",
" descriptions."}

subgoals:sgl

(comprehension

{question: "comprehension, or understanding text material,"}

content area reading,

correcting reversals,

critical thinking,

developing flexible reading rates,

handwriting,

language,

listening,
oral reading fluency,
reading motivation,
reading readiness,
speaking,
spelling,
study skills such as text_usage_and_test_taking,
vocabulary,
word attack,
word recognition,
writing)

{question:

"" Select ONE subgoal.",
""}

comprehension skills:mlt

(critical reading,
finding main idea,
locating information,
reading for a purpose,
responding to questions,
summarizing,
using context,
using learning how to learn strategies,
understanding relationships)

[illegible]

0000

0830

“”}.

(questioning

7.

```
{question:
```

7.

```
{question:
```

" they do their school work."

" }

```
{question:
```

0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	0100	0101	0102	0103	0104	0105	0106	0107	0108	0109	0110	0111	0112	0113	0114	0115	0116	0117	0118	0119	0120	0121	0122	0123	0124	0125	0126	0127	0128	0129	0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	0150	0151	0152	0153	0154	0155	0156	0157	0158	0159	0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	0180	0181	0182	0183	0184	0185	0186	0187	0188	0189	0190	0191	0192	0193	0194	0195	0196	0197	0198	0199	0200	0201	0202	0203	0204	0205	0206	0207	0208	0209	0210	0211	0212	0213	0214	0215	0216	0217	0218	0219	0220	0221	0222	0223	0224	0225	0226	0227	0228	0229	0230	0231	0232	0233	0234	0235	0236	0237	0238	0239	0240	0241	0242	0243	0244	0245	0246	0247	0248	0249	0250	0251	0252	0253	0254	0255	0256	0257	0258	0259	0260	0261	0262	0263	0264	0265	0266	0267	0268	0269	0270	0271	0272	0273	0274	0275	0276	0277	0278	0279	0280	0281	0282	0283	0284	0285	0286	0287	0288	0289	0290	0291	0292	0293	0294	0295	0296	0297	0298	0299	0300	0301	0302	0303	0304	0305	0306	0307	0308	0309	0310	0311	0312	0313	0314	0315	0316	0317	0318	0319	0320	0321	0322	0323	0324	0325	0326	0327	0328	0329	0330	0331	0332	0333	0334	0335	0336	0337	0338	0339	0340	0341	0342	0343	0344	0345	0346	0347	0348	0349	0350	0351	0352	0353	0354	0355	0356	0357	0358	0359	0360	0361	0362	0363	0364	0365	0366	0367	0368	0369	0370	0371	0372	0373	0374	0375	0376	0377	0378	0379	0380	0381	0382	0383	0384	0385	0386	0387	0388	0389	0390	0391	0392	0393	0394	0395	0396	0397	0398	0399	0400	0401	0402	0403	0404	0405	0406	0407	0408	0409	0410	0411	0412	0413	0414	0415	0416	0417	0418	0419	0420	0421	0422	0423	0424	0425	0426	0427	0428	0429	0430	0431	0432	0433	0434	0435	0436	0437	0438	0439	0440	0441	0442	0443	0444	0445	0446	0447	0448	0449	0450	0451	0452	0453	0454
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7.

(adaptations

```
{question:
```

"special needs."}

classroom organization

```
{question:
```

"such as small group work and whole class presentations,"

"run more successfully in classes with special needs".

"students."},

student organization skills

```
{question:
```

"Improve student organization skills.")

[illegible]

7.

"during teacher led instruction.").

"while doing homework."))

[illegible]

0000

7.

"Student needs are mild."

"Student needs are moderate."

"Student needs are severe.")

[illegible]

0000

```
{question:
```

- 214

problem severity =
 moderate<h>, severe<h>;
 treatment scope =
 one<l>, some<m>;
 teaching level =
 primary<n>, intermediate<m>, middle school<h>, high school<h>;]
 {lernatt:
 " "
 " "
 "L1 TAPE RECORDING EDUCATIONAL MATERIALS",
 " "
 " "
 "Developing taped materials often helps compensate for students' specific",
 "disabilities. Guidelines are provided which stress that taping materials",
 "may be more than verbatim taping of texts and lectures. Effective use of",
 "taping may, in fact, help students develop their study skills, as well as",
 "master the content.",
 " "

L2 MODELING MENTAL PROCESSES TO HELP POOR READERS BECOME MORE STRATEGIC

[description:
 goals =
 G1<a>;
 subgoals =
 comprehension;
 comprehension skills =
 using learning how to learn strategies<h>, critical reading<l>;
 problem situation =
 teacher led instruction<h>;
 problem severity =
 mild<m>, moderate<h>, severe<h>;
 treatment scope =
 one<m>, some<h>, all<l>;
 teaching level =
 primary<h>, intermediate<m>, middle school<l>, high school<n>;]
 {lernatt:
 " "
 " "
 "L2 MODELING MENTAL PROCESSES TO HELP POOR READERS BECOME MORE STRATEGIC",
 " "
 " "
 "Poor readers often benefit from having demonstrations of the mental, as",
 "well as the physical, aspects of reading. Mental modeling performed by",
 "the teacher is a technique that helps poor readers learn how successful",
 "readers think when they read. This teaching activity explains the",
 "rationale for modeling mental processes and uses teacher dialogues for",
 "illustration.",
 " "

L3 HELPING READERS UNDERSTAND DIFFERENT TYPES OF QUESTIONS

[description:
 goals =
 G1<a>;
 subgoals =

comprehension;
 comprehension skills =
 responding to questions;
 problem situation =
 independent work, away from class;
 problem severity =
 mild<h>, moderate<h>;
 treatment scope =
 some<m>, all<h>;
 teaching level =
 intermediate<h>, middle school<h>, high school<h>];
 {lernatt:
 " "
 "L3 HELPING READERS UNDERSTAND DIFFERENT TYPES OF QUESTIONS",
 " "
 "Students need to be strategic when they read expository texts. A way to",
 "help is to teach them to recognize certain types of questions that",
 "are to be answered with certain types of textual information. A step-",
 "by-step procedure for teaching question-answer relationships is given.",
 " "}

L4 AUTHORS CHAIR PEER CONFERENCING

[description:
 goals =
 G1<a>;
 subgoals =
 writing;
 problem situation =
 independent work, teacher led instruction<n>;
 problem severity =
 mild<h>, moderate<m>;
 treatment scope =
 some<h>, all<h>;
 teaching level =
 intermediate<m>, middle school<h>, high school<h>];
 {lernatt:
 " "
 "L4 AUTHOR'S CHAIR/PEER CONFERENCING",
 " "
 "Classroom practice combining reading and writing helps students see",
 "relationships between reading and writing while improving their performance",
 "in both areas. Pairing students for peer conferencing helps them acquire",
 "several unique sensitivities, including an appreciation of reading and",
 "writing as constructive activities. Procedures for implementation are given.",
 " "}

L5 DIALOGUE JOURNALS

[description:
 goals =

G1<a>;
 subgoals =
 writing;
 problem situation =
 independent work, away from class, teacher led instruction<n>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 all<h>;
 teaching level =
 primary<l>, intermediate<h>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 "L5 DIALOGUE JOURNALS",
 " "
 "Dialogue Journals emphasize meaning while providing natural, functional",
 "experiences with both reading and writing. The technique is well known for",
 "building writing fluency and for developing rapport between teachers and",
 "students. These selections prepare teachers for implementing the technique",
 "in their classrooms.",
 " "]
 ,

L6 IMPROVING READING COMPREHENSION WITH SEMANTIC MAPPING

[description:
 goals =
 G1<a>;
 subgoals =
 comprehension, vocabulary;
 comprehension skills =
 understanding relationships<h>, finding main idea<m>,
 critical reading<l>, summarizing<l>;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<l>;
 problem severity =
 mild<h>, moderate<h>, severe<m>;
 treatment scope =
 some<m>, all<h>;
 teaching level =
 primary<m>, intermediate<h>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 "L6 IMPROVING READING COMPREHENSION WITH SEMANTIC MAPPING",
 " "
 "Semantic Mapping, also known as Webbing, involves a visual presentation of",
 "information and is used by teachers of all levels to motivate and actively",
 "involve students in the thinking-writing-reading processes. This teaching",
 "option is a collection of three articles which explain this technique and",
 "how it helps improve reading comprehension.",
 " "]
 ,

L7 CRITICAL LISTENING AND READING IN REMEDIAL READING

[description:

goals =

G1<a>;

subgoals =

listening;

problem situation =

teacher led instruction;

problem severity =

mild<h>, moderate<m>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<m>, intermediate<h>, middle school<h>, high school<m>];

{lernatt:

" "

"L7 CRITICAL READING AND LISTENING IN REMEDIAL READING",

" "

"Consistent direct instruction in critical listening can improve students",

"reading comprehension. The positive effects of a critical reading and",

"listening approach can lead to increased enjoyment of reading. The article",

"tells how to implement the approach and explains the research which",

"supports its use.",

" "}

,

L8 TEACHING EXPOSITORY TEXT STRUCTURE

[description:

goals =

G1<a>;

subgoals =

content area reading;

problem situation =

teacher led instruction<h>, independent work<m>, away from class<m>;

problem severity =

mild<h>, moderate<h>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<m>, intermediate<h>, middle school<m>, high school<l>];

{lernatt:

" "

"L8 TEACHING EXPOSITORY TEXT STRUCTURE",

" "

"Teaching students to recognize expository text structure helps students",

"of all grade levels improve their comprehension of content area materials.",

"This teaching activity presents a step by step method of helping students",

"understand the meaning of structure and how to recognize -- and write -- the",

"five major forms. Though the article is aimed at elementary teachers,",

"the technique can be easily adapted for older students simply by removing",

"or modifying the step involving manipulatives.",

" "}

L9 MOTOR IMAGING A READING VOCABULARY STRATEGY

[description:

goals =

G1<a>;

subgoals =

vocabulary;

problem situation =

teacher led instruction;

problem severity =

moderate<h>, severe<h>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<h>, intermediate<m>, middle school<n>, high school<n>;]

{lernatt:

" "

"L9 MOTOR IMAGING A READING VOCABULARY STRATEGY",

" "

"Motor imaging uses a word learning strategy based on psychomotor",

"associations. Steps are detailed to help teachers see how they can",

"teach their students to connect a new word with a pantomime as well as",

"a language meaning.",

" "}

L10 RATE A REASON TO READ

[description:

goals =

G1<a>;

subgoals =

comprehension, reading motivation;

comprehension skills =

reading for a purpose;

problem situation =

independent work<h>, away from class<l>;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<l>, intermediate<h>, middle school<l>, high school<n>;]

{lernatt:

" "

"L10 RATE A REASON TO READ",

" "

"Motivation to read is such an important factor in learning to read that",

"motivational strategies are often needed. RATE, for Read And Then",

"Evaluate, invites students to read library books then evaluate them",
 "according to student-determined criteria. This article reports",
 "the outstanding success the RATE program has had in a school.",
 " "}

L11 LANGUAGE INTERVENTIONS IN NATURAL SETTINGS

[description:

goals =

G1<a>;

subgoals =

language;

problem situation =

teacher led instruction;

problem severity =

mild<m>, moderate<h>, severe<h>;

treatment scope =

one<h>, some<h>;

teaching level =

primary<h>, intermediate<l>, middle school<n>, high school<n>:]

{lernatt:

" "

"L11 LANGUAGE INTERVENTIONS IN NATURAL SETTINGS",

" "

"Teachers of handicapped children often have problems getting them to use",

"language spontaneously. This teaching activity recommends an approach called",

"milieu teaching and describes how and when teachers can encourage and",

"reinforce interactions using this method.",

" "}

L12 SONG PICTURE BOOKS

[description:

goals =

G1<a>;

subgoals =

listening, language;

problem situation =

teacher led instruction;

problem severity =

mild<h>, moderate<h>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<h>, intermediate<l>, middle school<n>, high school<n>:]

{lernatt:

" "

"L12 SONG PICTURE BOOKS",

" "

"With a rich potential for child involvement, song picture books can",

"facilitate the development of language competence. Procedures for",
 "implementation are listed, and a bibliography of songs is provided.",
 " "}

L13 CLOZE PROCEDURE

[description:

goals =

G1<l>, G3<h>;

subgoals =

comprehension, word attack;

comprehension skills =

using context;

problem situation =

independent work;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<m>, some<h>, all<m>;

teaching level =

primary<l>, intermediate<m>, middle school<h>, high school<h>];

{lernatt:

" "

"L13 CLOZE PROCEDURE",

"The Cloze procedure has two uses, diagnostic and instructional. This",

"teaching option explains both uses and tells how to prepare Cloze materials.",

"As a diagnostic technique, the Cloze gives a very close estimate of how",

"well particular students will perform with text material. As an",

"instructional technique, it helps students grasp meaning by using",

"contextual information.",

" "}

L14 LEARNING CENTERS

[description:

goals =

G1<h>, G3<m>;

subgoals =

word attack, vocabulary, spelling;

problem situation =

independent work;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<h>, intermediate<m>, middle school<n>, high school<n>];

{lernatt:

" "

"L14 LEARNING CENTERS",

" "

"Learning centers are a valuable addition to the classroom for many reasons",
"including reinforcing new skills, diagnosing problems in skill development",
"and developing independence with new skills. This teaching option gives",
"information about learning centers with suggestions of numerous types of",
"centers."

"")

L15 VOCABULARY CENTERS

[description:

goals =

G1<h>, G3<l>;

subgoals =

vocabulary;

problem situation =

independent work;

problem severity =

mild<h>, moderate<h>;

treatment scope =

some<h>, all<h>;

teaching level =

primary<n>, intermediate<h>, middle school<h>, high school<n>:]

{lernatt:

" "

"L15 VOCABULARY CENTERS",

" "

"Instructional centers are useful for reinforcing skills and diagnosing",
"deficiencies in language arts. This teaching option provides sample",
"learning centers useful for extending elementary and middle school",
"students' vocabulary development. This teaching activity demonstrates",
"how to develop generic vocabulary centers that are appropriate for most",
"vocabulary lists."

"")

L16 SUMMARIZATION SKILLS

[description:

goals =

G1<a>;

subgoals =

comprehension;

comprehension skills =

summarizing, finding main idea;

problem situation =

teacher led instruction, independent work, away from class;

problem severity =

mild<h>, moderate<h>;

treatment scope =

some<h>, all<m>;
 teaching level =
 primary<m>, intermediate<h>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 " "
 "L16 SUMMARIZATION SKILLS",
 " "
 "It is very important to see that students can summarize what they read",
 "in school. Summarizing helps students learn to find the main idea and to",
 "recall what they read. It also helps them clarify the meaning and the",
 "significance of what they read. This teaching option gives steps for",
 "teaching summarization skills and provides an indepth discussion of",
 "summary instruction.",
 " "}

L17 TEXT LOOKBACK STRATEGY

[description:
 goals =
 G1<a>;
 subgoals =
 comprehension;
 comprehension skills =
 locating information, using context;
 problem situation =
 independent work, away from class;
 problem severity =
 mild<h>, moderate<h>;
 treatment scope =
 one<h>, some<h>, all<h>;
 teaching level =
 primary<m>, intermediate<h>, middle school<h>, high school<m>:]
 {lernatt:
 " "
 " "
 "L17 TEACHING LOOKBACK STRATEGY",
 " "
 "Unsuccessful readers often need to learn how important it is to simply",
 "look back at previously read material to locate information. Often they",
 "need to learn that looking back is legitimate—not cheating. Guidelines",
 "for teaching a lookback strategy are given, as well as a study which",
 "supports the use of the approach.",
 " "}

L18 REQUEST PROCEDURE FOR RECIPROCAL QUESTIONING

[description:
 goals =
 G1<a>;
 subgoals =
 comprehension;

comprehension skills =
 responding to questions;
 problem situation =
 independent work;
 problem severity =
 mild<h>, moderate<m>;
 treatment scope =
 some<h>, all<h>;
 teaching level =
 primary<l>, intermediate<m>, middle school<h>, high school<m>;]
 {lernatt:

" "
 "L18 REQUEST PROCEDURE FOR RECIPROCAL QUESTIONING",
 " "

"The ReQuest Procedure is designed to help students: (1) Form their own",
 "questions about what they are reading and develop a questioning attitude,"
 "(2) Become more purposeful readers, (3) Improve their independent reading",
 "comprehension skills. Steps of the procedure are provided."
 " "}

L19 DEVELOPING READING FLUENCY IN LD STUDENTS

[description:
 goals =
 G1<h>;
 subgoals =
 oral reading fluency;
 problem situation =
 teacher led instruction;
 problem severity =
 mild<l>, moderate<h>, severe<h>;
 treatment scope =
 one<l>, some<h>, all<h>;
 teaching level =
 primary<h>, intermediate<h>, middle school<m>, high school<l>;]
 {lernatt:

" "
 "L19 DEVELOPING READING FLUENCY IN LD STUDENTS",
 " "

"Many learning disabled students experience severe oral reading difficulties,"
 "Six techniques are presented to help improve their oral reading and to help",
 "them perceive themselves as more effective readers, an important component",
 "in a reading improvement program."
 " "}

L20 ANALYZING SPELLING ERROR PATTERNS FOR REMEDIATION

[description:
 goals =
 G3;
 subgoals =

```

spelling;
problem situation =
independent work;
problem severity =
mild<l>, moderate<m>, severe<h>;
treatment scope =
one<h>, some<m>, all<l>;
teaching level =
primary<h>, intermediate<h>, middle school<m>, high school<m>;]
{lernatt:
" "
"L20 ANALYZING SPELLING ERROR PATTERNS FOR REMEDIATION",
" "
"Observing students' error patterns gives teachers insights into students'",
"hypotheses about the writing system. It also helps with diagnosis of",
"individual patterns of strengths and weaknesses that can be used in",
"planning instruction. A useful technique is described.",
" ")

```

L21 READING READINESS PROBLEMS AND SOLUTIONS

```

[description:
goals =
G1;
subgoals =
reading readiness;
problem situation =
teacher led instruction;
problem severity =
mild<h>, moderate<m>, severe<l>;
treatment scope =
one<l>, some<h>, all<m>;
teaching level =
primary<h>, intermediate<l>, middle school<n>, high school<n>;]
{lernatt:
" "
"L21 READING READINESS PROBLEMS AND SOLUTIONS",
" "
"Reading readiness dianostic questions are given accompanied by numerous",
"techniques to help in each area of weakness.",
" ")

```

L22 DIRECT INSTRUCTION OF MATHEMATICS

```

[description:
goals =
G4;
problem situation =
teacher led instruction<h>, independent work<n>, away from class<n>;
problem severity =

```

mild<h>, moderate<m>;

treatment scope =

some<m>, all<h>];

{lernatt:

" "

"L22 DIRECT INSTRUCTION OF MATHEMATICS",

" "

"A highly effective format for structuring math lessons is outlined.",

" "}

L23 LANGUAGE EXPERIENCE FOR PROBLEM SOLVING IN MATHEMATICS

[description:

goals =

G4<h>;

problem situation =

teacher led instruction;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

one<l>,some<m>, all<h>;

teaching level =

primary<a>];

{lernatt:

" "

"L23 LANGUAGE EXPERIENCE FOR PROBLEM SOLVING IN MATHEMATICS",

" "

"Language Experience Approach, known more for its use in beginning reading,"

"is recommended to help children develop broader comprehension and",

"application of mathematical concepts. The procedure is given with the report",

"of a study which gives evidence of its effectiveness.",

" "}

L24 MATHEMATICS AND THE SPECIAL STUDENT

[description:

goals =

G4;

problem situation =

teacher led instruction, independent work;

treatment scope =

some<m>, all<h>;

teaching level =

primary<h>, intermediate<h>, middle school<h>, high school<l>];

{lernatt:

" "

"L24 MATHEMATICS AND THE SPECIAL STUDENT",

" "

"The purpose of this teaching option is to assist teachers in identifying",

"students with special learning problems in mathematics, in selecting",

"materials to use with these students, and in developing strategies",

"appropriate for use with the special student.",

" "}

L25 ASSESSING ARITHMETIC SKILLS

[description:

goals =

G6;

teaching level =

primary<h>, intermediate<h>, middle school<l>, high school<n>];

{lernatt:

" "

"L25 ASSESSING ARITHMETIC SKILLS",

" "

"This teaching option gives information about arithmetic assessment",
"and provides teachers with numerous useful techniques. It stresses the",
"importance of informal classroom measures for monitoring students",
"progress and planning instruction.",

" "}

L26 ADAPTING ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION

[description:

goals =

G5<h>;

problem situation =

teacher led instruction, independent work;

treatment scope =

one<h>, some<h>, all<m>;

teaching level =

primary<h>, intermediate<h>, middle school<n>, high school<n>];

{lernatt:

" "

"L26 ADAPTING ELEMENTARY SCHOOL MATHEMATICS INSTRUCTION",

" "

"When a mismatch occurs between a student's abilities and mathematics",
"assignments, instructional adaptations can be made to improve the",
"student's opportunities to learn. Ten common areas of difficulty are",
"presented with their possible causes and adaptations that can help",
"the student overcome the difficulties.",

" "}

L27 PEER TUTORING

[description:

goals =

G2<h>, G8<h>;

subgoals8 =

adaptations;

problem situation =

independent work;
 problem severity =
 mild<m>, moderate<h>, severe<m>;
 treatment scope =
 one<h>, some<m>, all<n>;
 teaching level =
 primary<m>, intermediate<m>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 " "
 "L27 PEER TUTORING",
 " "
 " "
 "Peer tutoring is valuable for students who need extra help, who can give",
 "extra help, or who need the experience of working with another person.",
 "The values of peer tutoring are presented with techniques for implementing",
 "a peer tutoring program.",
 " "}
 ,

L28 WORD PROCESSING TO IMPROVE STUDENT WRITING [description:

goals =
 G1;
 subgoals =
 writing;
 problem situation =
 independent work, teacher led instruction<n>;
 treatment scope =
 one<l>, some<l>, all<h>:]
 {lernatt:
 " "
 " "
 "L28 WORD PROCESSING TO IMPROVE STUDENT WRITING",
 " "
 " "
 "Word processing does not teach writing, but it is a powerful tool to help",
 "students improve their writing. It encourages seeing writing as a process",
 "while it fits well into instruction that includes student/teacher",
 "conferencing and/or peer collaboration. One researcher says that word",
 "processing for learning disabled students is such a boon that it is as",
 "though written language has been reinvented to specifically meet their",
 "needs. Advantages and uses are presented in two articles.",
 " "}
 ,

L29 LIFE SIZE LEARNING GAMES

[description:

goals =

G8<h>;

subgoals8 =

classroom organization, adaptations;

problem situation =

teacher led instruction;

problem severity =

mild<m>, moderate<h>, severe<m>;

treatment scope =

all<h>;

teaching level =

primary<a>];

{lernatt:

" "

"L29 LIFE SIZE LEARNING GAMES",

" "

"A detailed description of the how-to's for planning, constructing, and",

"using life-size games is given. These games are highly motivating and",

"employ a total sensory integration approach, which is often very successful",

"with learning disabled children.",

" "}

,

L30 LANGUAGE EXPERIENCE APPROACH IN PRIMARY SCIENCE

[description:

goals =

G1<h>;

subgoals =

comprehension, vocabulary, reading readiness;

comprehension skills =

understanding relationships;

problem situation =

teacher led instruction;

treatment scope =

one<n>, some<l>, all<h>;

teaching level =

primary<a>];

{lernatt:

" "

"L30 LANGUAGE EXPERIENCE APPROACH IN PRIMARY SCIENCE",

" "

"Science activities are a natural way to increase children's background of",

"experiences, and language experience approach--known for its usefulness in",

"beginning reading--is a natural way to increase children's knowledge of",

"experience and print relationships. The two together promote the",

"development of science skills and concepts while stimulating students to",

"ask questions and to respond through speaking, listening, writing, and",

"reading. The procedure is presented.",

" "}

L31 SPELLING

[description:

goals =

G1;

subgoals =

spelling;

problem situation =

independent work;

problem severity =

mild<l>, moderate<h>, severe<h>;

treatment scope =

some<h>, all<l>;

teaching level =

primary<l>, intermediate<h>, middle school<m>, high school<l>];

{lernatt:

" "

"L31 SPELLING",

" "

"This teaching option presents a variety of strategies for teaching",

"spelling to students who have problems learning by conventional methods.",

" "}

L32 DICTATION AN ADDITIONAL STUDENT TEAM LEARNING TECHNIQUE

[description:

goals =

G1<h>, G2<m>;

subgoals =

listening, language, spelling, writing;

problem situation =

independent work, teacher led instruction<n>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

some<m>, all<h>;

teaching level =

primary<l>, intermediate<h>, middle school<h>, high school<l>];

{lernatt:

" "

"L32 DICTATION: AN ADDITIONAL STUDENT TEAM LEARNING TECHNIQUE",

" "

"'Dictation' is a cooperative learning technique that gives students a chance",

"to practice and add to their language skills. No special materials are",

"required, and it is easy to implement. Steps are explained.",

" "}

L33 CLASSROOM READING INCENTIVE PROGRAMS

[description:

goals =
 G1<h>, G2<m>;
 subgoals =
 reading motivation, comprehension;
 comprehension skills =
 reading for a purpose;
 problem situation =
 independent work<h>, away from class<h>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 some<m>, all<h>;
 teaching level =
 primary<h>, intermediate<h>, middle school<l>, high school<n>;]
 {lernatt:
 " "
 "L33 CLASSROOM READING INCENTIVE PROGRAMS",
 " "
 "Many classroom reading incentive programs provide the greatest rewards to",
 "the students least in need of incentive, and in fact set up hurdles for",
 "poor readers. For example, public displays of the numbers of books read",
 "can be embarrassing for poor readers, while individual charts of minutes",
 "spent reading can be encouraging for all students. This teaching activity",
 "gives 7 guidelines for regular classroom teachers to use in planning",
 "incentive programs that benefit poor as well as good readers.",
 " "}

L34 DIAGNOSTIC AND REMEDIAL READING CHAPTER ON CLASSROOM DIAGNOSIS

[description:
 goals =
 G3<a>;
 teaching level =
 primary<h>, intermediate<h>, middle school<m>;]
 {lernatt:
 " "
 "34 DIAGNOSTIC AND REMEDIAL READING CHAPTER ON CLASSROOM DIAGNOSIS",
 " "
 "This teaching option tells the classroom teacher what to look for in",
 "various areas when making an informal, classroom-based reading diagnosis.",
 "These areas are: the learning climate, the various causes of reading",
 "difficulty, the possible instructional adjustments that can be made, and",
 "the continuous assessment of the student's progress.",
 " "}

L35 INTEGRATING READING INSTRUCTION IN SCIENCE AND SOCIAL STUDIES

[description:
 goals =
 G1<h>;

subgoals =
 content area reading;
 problem situation =
 teacher led instruction<l>, independent work<h>, away from class<m>;
 problem severity =
 mild<l>, moderate<m>, severe<h>;
 treatment scope =
 one<l>, some<h>, all<h>;
 teaching level =
 primary<n>, intermediate<m>, middle school<h>, high school<l>];
 {lernatt:
 " "
 "L35 INTEGRATING READING INSTRUCTION IN SCIENCE AND SOCIAL STUDIES",
 " "
 "Many students are poor readers of text material even when they are",
 "successful story readers. This teaching activity combines two",
 "workbooks -- one from science and one from social studies --",
 "to illustrate how reading process instruction can be embedded in content",
 "area materials to help students comprehend what they read.",
 " "}
 ,

L36 FLUENCY FOR EVERYONE

[description:
 goals =
 G1<h>;
 subgoals =
 oral reading fluency;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<l>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 one<h>, some<h>, all<h>;
 teaching level =
 primary<h>, intermediate<h>, middle school<l>, high school<l>];
 {lernatt:
 " "
 "L36 FLUENCY FOR EVERYONE",
 " "
 "This teaching activity recommends a set of principles that can help",
 "teachers create fluency activities to meet individual needs in their",
 "regular classrooms. Numerous examples are given to help teachers see",
 "how to incorporate these principles in their planning.",
 " "}
 ,

L37 ADAPTING THE INSTRUCTIONAL ENVIRONMENT FOR MAINSTREAMING

[description:
 goals =
 G8<h>;
 subgoals8 =

```

adaptations;
problem situation =
teacher led instruction, independent work;
problem severity =
mild<m>, moderate<h>, severe<h>;
treatment scope =
one<m>, some<h>, all<l>:]
{lernatt:
" "
" "
"L37 ADAPTING THE INSTRUCTIONAL ENVIRONMENT FOR MAINSTREAMING",
" "
"This teaching option is a text chapter which tells teachers how to adapt",
"their classroom environment to be a better fit for the special needs of",
"handicapped students.",
" "
}

```

L38 TEN WAYS TO ENCOURAGE STUDENTS TO SPEAK UP

```

[description:
goals =
G1<h>;
subgoals =
speaking;
problem situation =
teacher led instruction, independent work;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<m>, some<m>, all<h>;
teaching level =
primary<h>, intermediate<h>, middle school<n>, high school<n>:]
{lernatt:
" "
"L38 TEN WAYS TO ENCOURAGE STUDENTS TO SPEAK UP",
" "
"This teaching activity lists numerous ways teachers can encourage",
"their students to develop verbal skills. Areas that are covered are:",
"discussing, explaining, impromptu speaking, interviewing, broadcasting",
"reporting, telephoning, storytelling, creative drama, and sharing.",
" "
}

```

L39 GRADING ELEMENTARY

```

[description:
goals =
G8<h>;
subgoals8 =
adaptations;
problem severity =
mild<m>, moderate<h>, severe<h>;

```

```

treatment scope =
one<h>, some<h>, all<l>;
teaching level =
primary<h>, intermediate<h>, middle school<n>, high school<n>:]
{lernatt:
" "
"L39 GRADING ELEMENTARY",
" "
"Assigning grades is often problematic, but particularly when one or",
"more students is handicapped and mainstreamed into a regular class.",
"Numerous suggestions are given to help teachers evaluate students in",
"mainstream classes.",
" "}

```

L40 SPECIFIC ADAPTIVE STRATEGIES

```

[description:
goals =
G8<h>;
subgoals8 =
adaptations;
problem situation =
teacher led instruction, independent work, away from class;
problem severity =
mild<m>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<l>;
teaching level =
primary<n>, intermediate<l>, middle school<h>, high school<h>:]
{lernatt:
" "
"L40 SPECIFIC ADAPTIVE STRATEGIES",
" "
"Specific adaptations are listed to enhance handicapped students' learning",
"opportunities in math, handwriting, spelling, social studies, science,",
"language arts, and study skills/organization. Alternate grading techniques",
"are also given.",
" "}

```

L41 CLASSROOM MODIFICATIONS BASED ON HANDICAPPING CONDITIONS

```

[description:
goals =
G8<h>;
subgoals8 =
adaptations;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<h>;

```

teaching level =

primary<h>, intermediate<h>, middle school<h>, high school<h>:]

{lernatt:

" "

"L41 CLASSROOM MODIFICATIONS BASED ON HANDICAPPING CONDITIONS",

" "

"Numerous modifications are given for each of several handicapping",
"conditions. For example, a recommendation for teaching a student with",
"a language fluency problem is to encourage speaking when all is going",
"well and immediately minimize demands to communicate when stuttering",
"becomes more pronounced. Another example, for the learning disabled",
"student in math, space his/her problems farther apart on the page.",
" "}

L42 ASSESSMENT

[description:

goals =

G9<h>:]

{lernatt:

" "

"L42 ASSESSMENT",

" "

"Having an 'assessment orientation' to teaching usually saves the",
"teacher from teaching content and skills that are already known. This",
"perspective is recommended, and a logical progression of activities that",
"should take place is provided.",
" "}

L43 FERNALD TECHNIQUE VAKT

[description:

goals =

G1<h>;

subgoals =

spelling<h>, word attack<h>;

problem situation =

teacher led instruction;

problem severity =

mild<n>, moderate<n>, severe<m>;

treatment scope =

one<h>, some<l>, all<n>;

teaching level =

primary<h>, intermediate<m>, middle school<n>, high school<n>:]

{lernatt:

" "

"L43 FERNALD TECHNIQUE VAKT",

" "

"This multisensory reading technique for students with extreme and partial",
"reading disability is described. Cautionary comments are important; they",
"advise that the procedure is time consuming in the early stages. Having",

"a classroom aide would be very useful.",

" "}

,

L44 TEACHING OLDER CHILDREN TO READ

[description:

goals =

G2<m>;

problem situation =

teacher led instruction<h>, independent work<m>, away from class<l>;

problem severity =

mild<l>, moderate<m>, severe<h>;

treatment scope =

one<h>, some<m>, all<m>;

teaching level =

primary<h>, intermediate<m>, middle school<n>, high school<n>];

{lernatt:

" "

"L44 TEACHING OLDER CHILDREN TO READ",

" "

"This teaching activity presents a program for teaching the older",

"elementary child to read. The program is based on the premise that",

"one learns to read by reading and that the older nonreader needs to",

"learn to read as quickly as possible. Illustrated guidelines are",

"provided.",

" "}

,

L45 READING IN THE CONTENT AREAS

[description:

goals =

G1<h>;

subgoals =

content area reading;

problem situation =

teacher led instruction, independent work;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<l>, some<h>, all<m>;

teaching level =

primary<n>, intermediate<m>, middle school<h>, high school<m>];

{lernatt:

" "

"L45 READING IN THE CONTENT AREAS",

" "

"The purpose of this teaching option is to assist teachers in development",

"of strategies to improve reading in the content areas. Basic principles",

"of improving students' opportunities to learn are presented and illustrated",

"with some applications of the principles. The content is appropriate for",

"teachers of all levels and subject areas, regardless of handicap.",

" "}

L46 PEER TUTORING MATH FACTS

[description:

goals =

G5;

problem situation =

independent work;

problem severity =

mild<m>, moderate<h>, severe<l>;

treatment scope =

one<h>, some<h>, all<n>;

teaching level =

primary<m>, intermediate<h>, middle school<h>, high school<m>;]

{lernatt:

" "

"L46 PEER TUTORING MATH FACTS",

" "

"Peer tutoring is often an efficient and effective means of individualizing",

"instruction. This variation is described as a way of drilling basic math",

"facts.",

" "}

L47 ALL CHILDREN CAN WRITE

[description:

goals =

G1<a>;

subgoals =

writing;

problem situation =

independent work<h>, away from class<l>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<h>, some<h>, all<h>;

teaching level =

primary<h>, intermediate<h>, middle school<h>, high school<l>;]

{lernatt:

" "

"L47 ALL CHILDREN CAN WRITE",

" "

"The writing-process approach is described and stressed as a highly",

"effective way of improving the writing of learning disabled students.",

" "}

L48 WORD ATTACK INTERVENTIONS

```

[description:
goals =
G1<a>;
subgoals =
word attack;
problem situation =
teacher led instruction, independent work;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<h>;
teaching level =
primary<h>, intermediate<m>, middle school<l>, high school<n>:]
{lernatt:
" "
"L48 WORD ATTACK INTERVENTIONS",
" "
"This teaching option briefly defines word attack, then it lists and",
"describes numerous teaching approaches.",
" "}

```

L49 PREDICTABLE BOOKS

```

[description:
goals =
G1<h>, G2<h>;
subgoals =
comprehension<m>, word recognition<h>, language<m>;
comprehension skills =
using context;
problem situation =
teacher led instruction;
problem severity =
mild<m>, moderate<h>, severe<m>;
treatment scope =
one<l>, some<h>, all<l>;
teaching level =
primary<a>:]
{lernatt:
" "
"L49 PREDICTABLE BOOKS",
" "
"Children's literature that is written in a predictable style is an",
"important resource for young readers, particularly those who are having",
"some difficulty with traditional reading approaches. Discussion of a",
"Predictable Books approach is included with a helpful list of children's",
"books.",
" "}

```

L50 THE STORY FRAME APPROACH

[description:

goals =

G1<a>;

subgoals =

comprehension;

comprehension skills =

using context, finding main idea;

problem situation =

teacher led instruction;

problem severity =

mild<l>, moderate<m>, severe<h>;

treatment scope =

one<h>, some<h>, all<l>;

teaching level =

primary<n>, intermediate<l>, middle school<h>, high school<h>];

{lernatt:

" "

"L50 THE STORY FRAME APPROACH",

" "

"Story frames are patterns that help readers organize the information they",

"read, thereby enhancing their comprehension. Though the article targets",

"mildly retarded students as benefitting from this approach, it may be",

"recommended for all students who are having comprehension difficulties.",

" "}

L51 WRITING AS A TOOL TO IMPROVE CONTENT AREA READING

[description:

goals =

G1<h>;

subgoals =

comprehension, content area reading;

comprehension skills =

reading for a purpose;

problem situation =

independent work;

treatment scope =

one<n>, some<m>, all<h>;

teaching level =

primary<n>, intermediate<m>, middle school<h>, high school<m>];

{lernatt:

" "

"L51 WRITING AS A TOOL TO IMPROVE CONTENT AREA READING",

" "

"This teaching activity presents two methods of using writing to improve",

"students' reading comprehension in content areas. In both methods",

"emphasis is on careful reading followed by careful writing. In the",

"process students learn to see the reading-writing connection and move",

"away from viewing subject matter reading as a teacher-directed exercise.",

" "}

L52 QUESTIONING SKILLS

[description:

goals =

G7<h>;

subgoals7 =

questioning;

problem situation =

teacher led instruction<h>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<l>, some<m>, all<h>;

teaching level =

primary<h>, intermediate<h>, middle school<h>, high school<h>;]

{lernatt:

" "

"L52 QUESTIONING SKILLS",

" "

"This teaching activity has the purpose of assisting teachers in",

"developing awareness of the structure of questions which require",

"students to use ideas rather than simply recall facts. This",

"activity helps promote student involvement.",

" "}

L53 STRATEGIES TO EXTEND STUDENT THINKING

[description:

goals =

G1;

subgoals =

comprehension;

comprehension skills =

critical reading;

problem situation =

teacher led instruction<h>, independent work<h>, away from class<m>;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

one<n>, some<m>, all<h>;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>;]

{lernatt:

" "

"L53 STRATEGIES TO EXTEND STUDENT THINKING",

" "

"Numerous strategies are presented which help extend student thinking.",

"These techniques are good for heterogeneously organized classes of various",

"subjects and grade levels.",

" "}

L54 READING DIFFICULTIES__ADAPTING INSTRUCTION

[description:

goals =

G2<h>;

problem situation =

teacher led instruction, independent work;

problem severity =

mild<l>, moderate<m>, severe<h>;

treatment scope =

one<h>, some<m>;]

{lernatt:

" "

"L54 READING DIFFICULTIES: ADAPTING INSTRUCTION",

" "

"Some handicapped students have their disability complicated by the",

"inability to read successfully. This teaching option discusses",

"the special modifications needed for students such as this. Discussion",

"of adaptations for reading difficulties are associated with specific",

"handicapping conditions, such as hearing impairment and emotional",

"disturbance.",

" "}

L55 READING DIFFICULTIES__CORRECTING WORD RECOGNITION DEFICIENCIES

[description:

goals =

G1<h>;

subgoals =

word recognition;

problem situation =

teacher led instruction, independent work;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<h>, some<h>, all<m>;

teaching level =

primary<h>, intermediate<m>;]

{lernatt:

" "

"L55 READING DIFFICULTIES: CORRECTING WORD RECOGNITION DEFICIENCIES",

" "

"Skill in word recognition is a fundamental part of proficient reading at",

"any level. This chapter identifies the major deficiencies and provides",

"examples of exercises teachers can use to remediate these problems.",

" "}

L56 READING DIFFICULTIES__CORRECTING DECODING SKILL DEFICIENCIES

[description:

goals =

G1<h>;

subgoals =

word attack;

problem situation =

teacher led instruction, independent work;

teaching level =

primary<h>, intermediate<m>];

{lernatt:

" "

"L56 READING DIFFICULTIES: CORRECTING DECODING SKILL DEFICIENCIES",

" "

"The basic problems of faulty word-study skills are discussed, and sample",

"exercises for remediating deficiencies are presented.",

" "}

L57 READING DIFFICULTIES__LEFT RIGHT DIRECTIONALITY

[description:

goals =

G1<h>;

subgoals =

correcting reversals;

problem situation =

teacher led instruction, independent work;

problem severity =

moderate<l>, severe<h>;

treatment scope =

one<m>, some<h>;

teaching level =

primary<h>, intermediate<l>, middle school<n>, high school<n>];

{lernatt:

" "

"L57 READING DIFFICULTIES: LEFT-RIGHT DIRECTIONALITY",

" "

"Reversals are common among young children and are only indications of",

"learning problems when they persist and when they interfere with normal",

"reading development. When necessary for promoting normal reading",

"development, teachers must remediate poor skills. This teaching option",

"presents remediation procedures.",

" "}

L58 TACTICS FOR TEACHING ARITHMETIC

[description:

goals =

G4<h>;

problem situation =

teacher led instruction, independent work;
 problem severity =
 mild<m>, moderate<h>, severe<m>;
 treatment scope =
 some<h>, all<h>;
 teaching level =
 primary<h>, intermediate<m>, middle school<l>, high school<n>];
 {lernatt:
 " "
 " "
 "L58 TACTICS FOR TEACHING: ARITHMETIC",
 " "
 "Specific strategies for teaching basic computational skills are presented.",
 "Some strategies focus on skill placement and on setting goals, some",
 "focus on adjustments teachers can make to improve students' opportunities",
 "to succeed, and some focus on ways teachers can help students attend to",
 "the arithmetic task at hand.",
 " "}

L59 COOPERATIVE LEARNING AND COMPUTERS IN MATH CLASSROOMS

[description:
 goals =
 G4<h>, G5<m>;
 problem situation =
 independent work;
 problem severity =
 mild<h>, moderate<l>, severe<n>;
 treatment scope =
 some<l>, all<h>;
 teaching level =
 primary<l>, intermediate<h>, middle school<h>, high school<n>];
 {lernatt:
 " "
 " "
 "L59 COOPERATIVE LEARNING AND COMPUTERS IN MATH CLASSROOMS",
 " "
 "This teaching option presents the essential ingredients of cooperative",
 "computer lessons in math classes. Included are (1) principles of",
 "cooperative learning and software selection and (2) samples of lessons.",
 " "}

L60 MANAGING SPECIAL GROUPS IN ELEMENTARY SCHOOL

[description:
 goals =
 G8<h>;
 subgoals8 =
 classroom organization;
 teaching level =
 primary<h>, intermediate<h>, middle school<n>, high school<n>];
 {lernatt:

" "
" " "
"L60 MANAGING SPECIAL GROUPS IN ELEMENTARY SCHOOL",
" "

"Information and suggestions are given for successfully managing",
"heterogeneous classes and low-ability classes. Topics include: assessing",
"entering achievement, identifying special groups, strategies for individual",
"differences, and teaching low achieving students.",
" "}

L61 MANAGING SPECIAL GROUPS IN SECONDARY SCHOOL

[description:

goals =

G8<h>;

subgoals8 =

classroom organization;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L61 MANAGING SPECIAL GROUPS IN SECONDARY SCHOOL",
" "

"Information and suggestions are given for successfully managing",
"heterogeneous and low achieving classes. Topics include: assessment",
"modifying instruction, small group instruction, learner characteristics",
"and classroom management.",
" "}

L62 TEACHING WRITING TO LEARNING DISABLED ADOLESCENTS

[description:

goals =

G1;

subgoals =

writing;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L62 TEACHING WRITING TO LEARNING DISABLED ADOLESCENTS",
" "

"Methods of teaching LD adolescents with written expression deficits are",
"presented. Attention is given to students' attitudes toward their writing",
"and to the components of a writing program that will improve their",
"abilities.",
" "}

L63 ASSESSING MATHEMATICS SKILLS IN LD ADOLESCENTS

[description:

```

goals =
G6;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" "
"L63 ASSESSING MATHEMATICS SKILLS IN LD ADOLESCENTS",
" "
"Methods of assessment are presented. In the area of informal assessment",
"a major point is that task analysis allows teachers to recognize numerous",
"implicit steps involved in what appears to be a simple operation.",
" "
}

```

L64 TEACHING MATHEMATICS TO LEARNING DISABLED ADOLESCENTS

```

[description:
goals =
G4;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" "
"L64 TEACHING MATHEMATICS TO LEARNING DISABLED ADOLESCENTS",
" "
"Information is presented on the concepts of mathematics, the competencies",
"required by students, and the specific deficiencies of LD students. Also",
"presented are a number of strategies to enhance LD students' math skills.",
" "
}

```

L65 TEACHING LISTENING STRATEGIES TO LD ADOLESCENTS

```

[description:
goals =
G1;
subgoals =
listening;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" "
"L65 TEACHING LISTENING STRATEGIES TO LD ADOLESCENTS",
" "
"A concern is that in language arts listening is given the least",
"attention. However, it is often a major problem area for LD students.",
"Listening is defined and explained in terms of its difficulties for LD",
"students. Suggestions are given for helping LD adolescents improve their",
"skills.",
" "
}

```

L66 TEACHING SPEAKING STRATEGIES TO LD ADOLESCENTS

[description:

goals =

G1;

subgoals =

speaking;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L66 TEACHING SPEAKING STRATEGIES TO LD ADOLESCENTS",

" "

"The continued development of oral language skills is important for both",

"social and academic achievement as adolescents progress through school.",

"Oral language problems are presented with suggestions for improving",

"students' skills.",

" "}

,

L67 TEACHING VOCABULARY TO LD ADOLESCENTS

[description:

goals =

G1;

subgoals =

vocabulary;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L67 TEACHING VOCABULARY TO LD ADOLESCENTS",

" "

"The importance of building vocabulary is stressed and methods of improving",

"student skill are provided.",

" "}

,

L68 INCREASING LD ADOLESCENT READING COMPREHENSION

[description:

goals =

G1;

subgoals =

comprehension;

comprehension skills =

finding main idea;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L68 INCREASING LD ADOLESCENT READING COMPREHENSION",

" "

"The importance of improving reading comprehension is stressed. Suggestions",

"for teaching are in the following areas: recognizing topic sentences,"
 "recognizing organizational patterns, improving visual imagery, using",
 "questioning strategies.",
 " "}

L69 DEVELOPING LD ADOLESCENT READING FLEXIBILITY

[description:

goals =

G1;

subgoals =

developing flexible reading rates;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L69 DEVELOPING LD ADOLESCENT READING FLEXIBILITY",

" "

"Students must vary their reading rate according to the difficulty level of",

"the material and their purpose for reading the passage. Suggestions are given",

"for teaching students how to develop flexibility.",

" "}

L70 HELPING LD ADOLESCENTS DEVELOP STUDY SKILLS

[description:

goals =

G1;

subgoals =

study skills such as text_usage_and_test_taking;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L70 HELPING LD ADOLESCENTS DEVELOP STUDY SKILLS",

" "

"The LD adolescent will usually require direct instruction in study skills,"

"understanding of the relationship between these skills and academic",

"achievement, and continued practice using these skills. Skills presented",

"are locational study skills, general organizational skills, organizing",

"reading, survey skills, and long-term storage and information retrieval.",

" "}

L71 REMEMBERING

[description:

goals =

G1;

subgoals =

```

study skills such as text_usage_and_test_taking;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" ",
"L71 REMEMBERING",
" ",
"The purpose is to provide teachers with a method of teaching the",
"memorization process. The following steps are presented: developing",
"interest, generating understanding, estimating effort, using a strategy,",
"using feedback, and repetition as practice.",
" "}

```

L72 TEXTBOOK USAGE

```

[description:
goals =
G1;
subgoals =
study skills such as text_usage_and_test_taking;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" ",

```

"L72 TEXTBOOK USAGE",

```

" ",
"The purpose of this teaching option is to provide teachers with a method",
"of helping students become more skilled at using their textbooks. The",
"specific skills include: knowing the parts of a text, using parts of a",
"text to locate information, and using text usage skills for appropriate tasks.",
" "}

```

L73 VISUAL AIDS

```

[description:
goals =
G1;
subgoals =
study skills such as text_usage_and_test_taking;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" ",
"L73 VISUAL AIDS",

```

"The purpose is to give teachers a method of helping their students use",
 "the various types of visual aids in textbooks. Presented is a",
 "sequenced unit in the use of tables, graphs, maps, and diagrams.",
 " "}

L74 SKIMMING AND SCANNING

[description:

goals =
 G1;
 subgoals =
 study skills such as text_usage_and_test_taking;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 "L74 SKIMMING AND SCANNING",
 " "
 "For students who read slowly a means of helping them attain greater speed",
 "without sacrificing comprehension, is important. Skimming and scanning",
 "are necessary study skills for these students. In this teaching option",
 "these skills are presented in a series of logical steps.",
 " "}

L75 TEST SKILLS

[description:

goals =
 G1;
 subgoals =
 study skills such as text_usage_and_test_taking;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 "L75 TEST SKILLS",
 " "
 "Learning disabled and low achieving adolescents live in a world of academic",
 "uncertainties. They habitually encounter difficulties in testing",
 "situations. They will benefit from the systematic instruction in",
 "test-taking skills presented here.",
 " "}

L76 AFTER YOUR STUDENTS WRITE

[description:

```

goals =
G1;
subgoals =
writing;
problem situation =
teacher led instruction<l>, independent work<h>, away from class<m>;
problem severity =
mild<h>, moderate<m>, severe<l>;
treatment scope =
one<n>, some<m>, all<h>;
teaching level =
primary<n>, intermediate<m>, middle school<h>, high school<h>:]
{lernatt:
" ",
"L76 AFTER YOUR STUDENTS WRITE?",
" ",
"A shift in the teaching of writing is occurring which benefits disabled",
"students--a shift from a final product orientation to writing as a process.",
"This teaching option explores the refining and polishing, or final stages,",
"of writing, focusing on the benefits to disabled students.",
" "}

```

L77 TEACHING TIME USING THE WHOLE CLOCK METHOD

```

[description:
goals =
G4;
problem situation =
teacher led instruction<a>;
problem severity =
mild<l>, moderate<m>, severe<h>;
treatment scope =
one<m>, some<h>, all<m>;
teaching level =
primary<m>, intermediate<m>, middle school<m>, high school<n>:]
{lernatt:
" ",
"L77 TEACHING TIME USING THE WHOLE CLOCK METHOD",
" ",
"When students are having trouble learning to tell time, the whole clock",
"method is often recommended. The technique is presented.",
" "}

```

L78 IT IS ABOUT TIME

```

[description:
goals =
G4;
problem situation =

```


teacher led instruction<a>;
 problem severity =
 mild<h>, moderate<m>, severe<l>;
 treatment scope =
 one<m>, some<h>, all<h>;
 teaching level =
 primary<h>, intermediate<l>, middle school<n>, high school<n>:]
 {lernatt:
 " "
 " "
 "L78 IT IS ABOUT TIME",
 " "
 " "
 "This strategy for teaching young children to tell time focuses on",
 "readiness activities and on breaking the task into components which",
 "are practiced to mastery.",
 " "}

L79 EVERY MINUTE COUNTS AND ITS SEQUEL

[description:
 goals =
 G4;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<n>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 one<m>, some<h>, all<h>;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>:]
 {lernatt:
 " "
 " "
 "L79 EVERY MINUTE COUNTS AND ITS SEQUEL",
 " "
 " "
 "These two booklets have been highly recommended by math",
 "teachers for their practical advice pertaining to classroom",
 "management techniques, questioning approaches, communication",
 "between teachers and students, successful lessons, working with",
 "parents, etc.",
 " "}

L80 MOTIVATE RELUCTANT LEARNING DISABLED WRITERS

[description:
 goals =
 G1;
 subgoals =
 writing;
 problem situation =
 independent work<h>, teacher led instruction<n>, away from class<n>;
 treatment scope =

```

one<n>, some<l>, all<h>;
teaching level =
primary<l>, intermediate<h>, middle school<h>, high school<m>:]
{lernatt:
" "
"
"L80 MOTIVATE RELUCTANT LD WRITERS",
" "
"The writing process approach is recommended with each step explained. The",
"focus is on the benefit to disabled students.",
" "
,

```

```

L81 STUDY SKILLS
[description :
goals =
G1;
subgoals =
study skills such as text_usage_and_test_taking;
teaching level =
primary<l>, intermediate<m>, middle school<h>, high school<h>:]
{lernatt:
" "
"
"L81 STUDY SKILLS",
" "
"Critically important in the teaching of learning disabled students is the",
"teaching of study skills. This importance is stressed as a means of",
"helping them take a more active part in their learning, and specific",
"strategies are given.",
" "
,

```

L82 INDIVIDUALIZING MATHEMATICS INSTRUCTION

```

[description:
goals =
G5;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<l>;
problem severity =
mild<m>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<l>;
teaching level =
primary<n>, intermediate<n>, middle school<h>, high school<h>:]
{lernatt:
" "
"
"L82 INDIVIDUALIZING MATHEMATICS INSTRUCTION",
" "
"The focus of this teaching option is to help secondary math teachers",

```

"resolve the dilemma of how to adapt instruction for handicapped students",
 "while continuing to meet the needs of the other students in the classroom.",
 "A number of techniques are discussed, and the steps involved in",
 "individualizing instruction are given.",
 " "}

L83 MAINSTREAMING AND COOPERATIVE LEARNING STRATEGIES

[description:

goals =
 G8<h>;
 subgoals8 =
 classroom organization;
 problem situation =
 independent work<h>, teacher led instruction<n>, away from class<n>;
 problem severity =
 mild<h>, moderate<m>, severe<l>;
 treatment scope =
 one<n>, some<l>, all<h>;
 teaching level =
 primary<m>, intermediate<h>, middle school<h>, high school<h>];
 {lernatt:
 " "
 "L83 MAINSTREAMING AND COOPERATIVE LEARNING STRATEGIES",
 " "
 "Using cooperative learning strategies to structure student-student",
 "interaction has the potential of achieving the social integration",
 "goal of the mainstreaming law. Values and principles of cooperative",
 "learning are presented with a step-by-step procedure. Attention is",
 "given to the needs of handicapped students who are being mainstreamed.",
 " "}

L84 USING THE DRA TO TEACH LITERARY COMPREHENSION

[description:

goals =
 G1;
 subgoals =
 comprehension;
 comprehension skills =
 understanding relationships,
 reading for a purpose, critical reading;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<l>;
 problem severity =
 mild<m>, moderate<l>, severe<n>;
 treatment scope =
 one<n>, some<m>, all<h>;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>];

{lernatt:

" "

"L84 USING THE DRA TO TEACH LITERARY COMPREHENSION",

" "

"This strategy builds on the familiar Directed Reading Activity and helps",
"teachers respond to the varying needs in their heterogeneously organized",
"English classes. Three lessons are included to show how a teacher can",
"focus on personal, structural/formal, interpretive/critical response levels",
"in the same class.",

" "}

L85 GRAPHIC ORGANIZERS

[description:

goals =

G1;

subgoals =

comprehension, content area reading;

comprehension skills =

understanding relationships, critical reading;

problem situation =

teacher led instruction<m>, independent work<h>, away from class<m>;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

one<l>, some<m>, all<h>;

teaching level =

primary<l>, intermediate<m>, middle school<h>, high school<h>;]

{lernatt:

" "

"L85 GRAPHIC ORGANIZERS",

" "

"Graphic organizers provide visual, holistic representation of facts and",
"concepts and their relationships, and have proven effective as tools for",
"thinking and learning. Numerous models are presented with a general",
"teaching procedure for teaching their use in classrooms.",

" "}

L86 VOCABULARY GAME

[description:

goals =

G1;

subgoals =

vocabulary;

problem situation =

teacher led instruction<h>, independent work<h>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<n>, some<l>, all<h>;
 teaching level =
 primary<l>, intermediate<h>, middle school<h>, high school<n>];
 {lernatt:
 " "
 " "
 "L86 VOCABULARY GAME",
 " "
 " "
 "This teaching activity gives the steps of a game involving teams",
 "which helps students increase their vocabulary and develop strategies",
 "for dealing with unfamiliar words while reading.",
 " "}

L87 IMPROVING COMPREHENSION
 [description:
 goals =
 G1;
 subgoals =
 comprehension;
 comprehension skills =
 understanding relationships;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<l>;
 problem severity =
 mild<h>, moderate<m>, severe<l>;
 treatment scope =
 one<l>, some<m>, all<h>;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>];
 {lernatt:
 " "
 " "
 "L87 IMPROVING COMPREHENSION",
 " "
 " "
 "Teaching for the anticipation of ideas and the appreciation of",
 "characterization are two components of successful literature instruction.",
 "Teaching procedures and practice exercises are given for both.",
 " "}

L88 SELF CORRECTION FOR IMPROVING WRITING SKILLS
 [description:
 goals =
 G1;
 subgoals =
 writing;
 problem situation =
 teacher led instruction<n>, independent work<h>, away from class<h>;
 problem severity =
 mild<m>, moderate<l>, severe<n>;
 treatment scope =

one<l>, some<m>, all<h>;
 teaching level =
 primary<n>, intermediate<m>, middle school<h>, high school<h>];
 {lernatt:

" "
 "L88 SELF-CORRECTION FOR IMPROVING WRITING SKILLS",
 " "

"The self-correction code is a system of markers for various grammatical",
 "errors often found in students' work. When teachers mark margins with",
 "coded errors, students have a tool for correcting their writing. Though",
 "the system described here was tested with deaf students, it is successful",
 "with other handicapped and nonhandicapped students.",
 " "}

L89 TIPS FOR BEING BETTER ORGANIZED FOR SCHOOL

[description:
 goals =
 G8<h>;
 subgoals8 =
 student organization skills;
 problem situation =
 teacher led instruction<n>, independent work<m>, away from class<h>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 one<h>, some<h>, all<h>;
 teaching level =
 primary<l>, intermediate<h>, middle school<h>, high school<h>];
 {lernatt:

" "
 "L89 TIPS FOR BEING BETTER ORGANIZED FOR SCHOOL",
 " "

"This teaching activity is a three page handout which contains",
 "suggestions on time management and on being better prepared for",
 "school. Suggestions are aimed at students and parents.",
 " "}

L90 INCREASING CRITICAL READING IN JUNIOR HIGH CLASSROOMS

[description:
 goals =
 G1;
 subgoals =
 comprehension;
 comprehension skills =
 critical reading;
 problem situation =
 teacher led instruction<h>, independent work<h>, away from class<l>;
 problem severity =

mild<m>, moderate<l>, severe<n>;
 treatment scope =
 one<n>, some<m>, all<h>;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<n>];
 {lernatt:
 " "
 "L90 INCREASING CRITICAL READING IN JUNIOR HIGH CLASSROOMS",
 " "
 "Three content area reading strategies are presented which are useful in",
 "English and social studies classes: anticipation-reaction guides, text",
 "previews, and 3-level study guides. These strategies incorporate the",
 "principles of small group cooperative learning while emphasizing higher",
 "order critical thinking.",
 " "}

L91 LOW STRESS ALGORITHMS

[description:
 goals =
 G5;
 problem situation =
 teacher led instruction<h>, independent work<h>, away from class<h>;
 problem severity =
 mild<n>, moderate<l>, severe<h>;
 treatment scope =
 one<m>, some<h>, all<l>;
 teaching level =
 primary<n>, intermediate<h>, middle school<h>, high school<m>];
 {lernatt:
 " "
 "L91 LOW-STRESS ALGORITHMS",
 " "
 "This approach was developed as a way to help students with remedial",
 "needs compute rapidly and accurately. Students using this technique",
 "demonstrate confidence they did not feel when using traditional methods.",
 "Success in research and practice has been claimed for the use of this",
 "approach with many students for whom conventional methods have not",
 "succeeded.",
 " "}

L92 GROUPING AND SPECIAL STUDENTS

[description:
 goals =
 G8<h>;
 subgoals8 =
 classroom organization;
 problem situation =
 teacher led instruction<l>, independent work<h>, away from class<n>;

problem severity =
 mild<h>, moderate<h>, severe<m>;
 treatment scope =
 one<m>, some<h>, all<m>;
 teaching level =
 primary<n>, intermediate<l>, middle school<h>, high school<h>;]

{lernatt:

" "

"L92 GROUPING AND SPECIAL STUDENTS",

" "

"The purpose of this teaching option is to help teachers see that various",
 "teaching objectives may be met by altering conventional organizational",
 "patterns. Teachers are encouraged to be innovative with their student",
 "grouping. Different types of groups and their functions are presented.",
 ""]

L93 CLOZING IN ON COMPREHENSION WITH THE CLOZE STORY MAP

[description:

goals =

G1;

subgoals =

comprehension;

comprehension skills =

locating information<l>, using context<h>,

understanding relationships<h>;

problem situation =

teacher led instruction<h>, independent work<m>, away from class<n>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<m>, some<m>, all<h>;

teaching level =

primary<m>, intermediate<h>, middle school<m>, high school<n>;]

{lernatt:

" "

"L93 CLOZING IN ON COMPREHENSION: THE CLOZE STORY MAP",

" "

"Strengths of semantic mapping, or webbing, are combined with the strengths",
 "of the cloze procedure as a means of improving students' reading",
 "comprehension. The basic plan for making a Cloze Story Map either for a",
 "narrative or expository form is given.",
 ""]

L94 GRADING SECONDARY

[description:

goals =

G8<h>;

subgoals8 =

adaptations;
 problem severity =
 mild<m>, moderate<h>, severe<h>;
 treatment scope =
 one<h>, some<h>, all<l>;
 teaching level =
 primary<n>, intermediate<n>, middle school<h>, high school<h>;]
 {lernatt:

" "

"L94 GRADING SECONDARY",

" "

"Traditional grading poses significant problems for teachers working with",
 "secondary learning disabled students. Alternative grading methods are",
 "suggested along with awareness materials.",
 " "}

L95 CLASSROOM ACCOMMODATIONS FOR MAINSTREAMING

\ several pages from the beginning on the Montgomery Co green book

[description:
 goals =
 G8<h>;
 subgoals8 =
 adaptations;
 problem situation =
 teacher led instruction<h>, independent work<m>, away from class<n>;
 problem severity =
 mild<m>, moderate<h>, severe<h>;
 treatment scope =
 one<h>, some<h>, all<l>;
 teaching level =
 primary<h>, intermediate<h>, middle school<h>, high school<h>;]
 {lernatt:

" "

"L95 CLASSROOM ACCOMMODATIONS FOR MAINSTREAMING",

" "

"Several pages are presented from a Montgomery County Public Schools handbook",
 "for successful mainstreaming of learning disabled students.",
 "Included are lists of classroom behaviors that often accompany",
 "specific handicaps. Also included is a checklist of reasonable",
 "classroom accommodations that have proven successful with learning",
 "disabled students.",
 " "}

L96 HELPING STUDENTS DEVELOP THEIR METACOGNITIVE SKILLS

[description:
 goals =

G1<h>, G7<h>;
 subgoals =
 comprehension;
 comprehension skills =
 using learning how to learn strategies;
 subgoals7 =
 thinking;
 problem situation =
 teacher led instruction<h>, independent work<h>, away from class<m>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 one<l>, some<m>, all<h>;
 teaching level =
 primary<h>, intermediate<h>, middle school<h>, high school<h>;]
 {lernatt:

" "
 "L96 HELPING STUDENTS DEVELOP THEIR METACOGNITIVE SKILLS",
 " "
 "Metacognition is our ability to know what we know and what we don't know",
 "and to know when we are attending to learning and when we are not. Many",
 "students, including the learning disabled, benefit from metacognitive",
 "training. A dozen suggestions are given for teachers of all grades and",
 "subjects to enhance their students' metacognitive skills.",
 " "}

L97 STRUCTURING CLASSROOMS FOR THINKING SKILLS

[description:
 goals =
 G7;
 subgoals7 =
 thinking;
 problem situation =
 teacher led instruction<a>;
 problem severity =
 mild<h>, moderate<h>, severe<h>;
 treatment scope =
 one<n>, some<l>, all<h>;
 teaching level =
 primary<m>, intermediate<h>, middle school<h>, high school<l>;]
 {lernatt:

" "
 "L97 STRUCTURING CLASSROOMS FOR THINKING SKILLS",
 " "
 "This teaching option describes an exciting classroom where students are",
 "engaged in critical thinking, and it presents 'Think-Pair-Share: A Multi-",
 "Mode Discussion Technique' and 'Think Trix', two strategies that are highly",
 "recommended for active, thinking classrooms.",
 " "}

L98 SHOW AND TELL WRITE AND READ

[description:

goals =

G1;

subgoals =

reading readiness;

problem situation =

teacher led instruction<a>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<m>, some<m>, all<h>;

teaching level =

primary<h>, intermediate<n>, middle school<n>, high school<n>];

{lernatt:

" "

"L98 SHOW AND TELL WRITE AND READ",

" "

"Many primary classrooms use a sharing time which can be linked very",

"directly to print by adding components of the language experience",

"approach. This teaching activity lists materials and steps of the",

"technique. The purpose is to relate print to students' lives and",

"interests.",

" "}

L99 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING

[description:

goals =

G1<h>, G7<h>;

subgoals =

critical thinking;

subgoals7 =

thinking;

problem situation =

teacher led instruction<h>, independent work<m>, away from class<l>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<l>, some<l>, all<h>;

teaching level =

primary<h>, intermediate<h>, middle school<h>, high school<h>];

{lernatt:

" "

"L99 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING",

" "

"Advice is given to teachers on their behaviors that promote critical",

"thinking. Their behaviors are discussed in these categories: Questioning,",

"Structuring, Responding, Modeling.",

" "}

L100 PRACTICAL STRATEGIES FOR THE DIRECT TEACHING OF THINKING SKILLS

[description:

goals =

G1;

subgoals =

critical thinking;

problem situation =

teacher led instruction<h>, independent work<m>, away from class<n>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<l>, some<m>, all<h>;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>];

{lernatt:

" "

"L100 PRACTICAL STRATEGIES FOR THE DIRECT TEACHING OF THINKING SKILLS",

" "

"Placing students in situations where they must think does not 'teach'",

"thinking skills. To improve the proficiency of student thinking, direct",

"instruction of thinking skills is often needed. A framework for teaching",

"critical thinking skills is given with guidelines for teaching these",

"skills.",

" "}

L101 COOPERATIVE SCRIPTS FOR PAIRED LEARNING

[description:

goals =

G1<h>, G2<m>;

subgoals =

comprehension, content area reading, reading motivation,

study skills such as text_usage_and_test_taking;

comprehension skills =

summarizing;

problem situation =

independent work<h>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<n>, some<h>, all<h>;

teaching level =

primary<n>, intermediate<l>, middle school<m>, high school<h>];

{lernatt:

" "

"L101 COOPERATIVE SCRIPTS FOR PAIRED LEARNING",

" "

"This strategy builds upon the traditional study strategy of studying with",

"a friend. With Cooperative Scripts students work in pairs and take turns",

"in the roles of 'recaller' and 'listener.' Steps are explained.",

" "

L102 STUDENT TEAMS ACHIEVEMENT DIVISIONS

[description:

goals =

G4;

problem situation =

independent work<h>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<n>, some<l>, all<h>;

teaching level =

primary<l>, intermediate<h>, middle school<h>, high school<h>;]

{lernatt:

" "

"L102 STUDENT TEAMS--ACHIEVEMENT DIVISIONS",

" "

"Steps for this cooperative learning method are given which include",

"a regular cycle of teaching, cooperative study in mixed-ability teams",

"and quizzes, followed by recognition or other rewards for teams whose",

"members exceed their previous records. Research and practice have shown",

"this strategy to be very effective.",

" "

L103 RECIPROCAL TEACHING

[description:

goals =

G1;

subgoals =

comprehension;

comprehension skills =

using context, summarizing, responding to questions,

using learning how to learn strategies,

critical reading;

problem situation =

teacher led instruction<m>, independent work<h>, away from class<n>;

problem severity =

mild<h>, moderate<h>, severe<m>;

treatment scope =

one<n>, some<h>, all<h>;

teaching level =

primary<m>, intermediate<h>, middle school<h>, high school<m>;]

{lernatt:

" "

"L103 RECIPROCAL TEACHING",

" "

"Reciprocal Teaching is a method for teaching metacognitive reading skills",

"to students who are having comprehension problems. Teachers can use this",
 "technique to help students improve such comprehension skills as learning",
 "to find main ideas and summarizing. Steps of the procedure are given with",
 "a sample dialogue of a teacher talking to his or her class.",
 " "}

L104 TEAM ASSISTED INDIVIDUALIZATION

[description:

goals =

G5;

problem situation =

independent work<h>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<n>, some<l>, all<h>;

teaching level =

primary<l>, intermediate<h>, middle school<h>, high school<h>:]

{lernatt:

" "

"L104 TEAM ASSISTED INDIVIDUALIZATION",

" "

"This cooperative learning technique is well known for accommodating the",
 "social and academic needs of mainstreamed math students. Research which",
 "supports its use is summarized, and steps for implementing the technique",
 "are given.",
 " "}

L105 TEACHING EXPRESSIVE SKILLS HANDWRITING

[description:

goals =

G1;

subgoals =

handwriting;

problem situation =

teacher led instruction, independent work, away from class;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<h>, some<h>, all<h>;

teaching level =

primary<h>, intermediate<h>, middle school<l>, high school<n>:]

{lernatt:

" "

"L105 TEACHING EXPRESSIVE SKILLS: HANDWRITING",

" "

"This teaching option tells how to assess students' handwriting problems",
 "and how to improve their skills. Also included are modifications for",
 " "

"specific disabilities.",

" "}

L106 APPLICATIONS OF MATHEMATICS IN OTHER SUBJECT AREAS

[description:

goals =

G4;

problem situation =

teacher led instruction<h>, independent work<l>, away from class<l>;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

one<m>, some<m>, all<h>;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>;]

{lernatt:

" "

"L106 APPLICATIONS OF MATHEMATICS IN OTHER SUBJECT AREAS",

" "

"The purpose of the teaching option is to examine the question of what",

"mathematical tools should the learning disabled student have to study",

"other subjects that involve mathematical concepts. Academic and vocational",

"areas are considered.",

" "}

L107 MATHEMATICS AND VOCATIONAL PREPARATION

[description:

goals =

G4;

teaching level =

primary<n>, intermediate<n>, middle school<l>, high school<h>;]

{lernatt:

" "

"MATHEMATICS AND VOCATIONAL PREPARATION",

" "

"This teaching option focuses on the vocational education of the learning",

"disabled adolescent and stresses the development and implementation of",

"comprehensive mathematics programs which meet the needs of vocational",

"education. A list of important numerical and quantitative skills is given.",

" "}

L108 FRACTIONS DECIMALS PERCENTAGES

[description:

goals =

G4;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>;]

{lernatt:

" "

"L108 FRACTIONS, DECIMALS, PERCENTAGES",

" "

"From a text on teaching math to secondary learning disabled students, this",

"chapter gives a scope and sequence of content in fractions, decimals, and",

"percent and suggests teaching activities.",

"")

L109 GEOMETRY CONCEPTS AND SKILLS

[description:

goals =

G4;

teaching level =

primary<n>, intermediate<n>, middle school<n>, high school<h>];

{lernatt:

" "

"L109 GEOMETRY CONCEPTS AND SKILLS",

" "

"The purpose of this teaching option is to demonstrate some",

"of the adaptations of existing materials and methods that are needed to",

"teach geometry to learning disabled students.",

"")

L110 ESTIMATING TEXT READABILITY

[description:

goals =

G3<h>;

problem situation =

teacher led instruction<m>, independent work<h>, away from class<m>;

problem severity =

mild<m>, moderate<h>, severe<h>;

treatment scope =

one<h>, some<h>, all<h>;

teaching level =

primary<n>, intermediate<l>, middle school<h>, high school<h>];

{lernatt:

" "

"L110 ESTIMATING TEXT READABILITY",

" "

"Often teachers become aware that one or more students are poorly matched",

"with their assigned reading materials. Using Fry's readability formula",

"and graph may determine that text is too difficult for a student to read.",

"This teaching option presents both the simple-to-use formula and graph and",

"an article by Fry clarifying and extending his technique.",

"")

L111 MANAGING THE ASSIGNMENT

```
[description:
goals =
G8<h>;
subgoals8 =
student organization skills;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<m>;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<h>;
teaching level =
primary<m>, intermediate<h>, middle school<h>, high school<h>:]
{lernatt:
" "
"L111 MANAGING THE ASSIGNMENT",
" "
"When students display poor organization skills, teachers sometimes",
"need to look at factors related to the assignments themselves as well",
"as to student behavior. Inappropriate behavior may be symptomatic of a",
"poor fit with the assignment. This teaching activity gives teachers",
"guidelines for looking at assignment directions, the difficulty level",
"of assignments, and adapting assignments and materials.",
" "
}
```

L112 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS

```
[description:
goals =
G8<h>;
subgoals8 =
student organization skills;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<m>;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<h>;
teaching level =
primary<m>, intermediate<h>, middle school<h>, high school<h>:]
{lernatt:
" "
"L112 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS",
" "
"Often accommodations are necessary to enable learning disabled",
"students to perform to the best of their abilities, and often",
"poor organizational behavior is at the core of their disability.",
"This teaching activity lists accommodations regular teachers have",
"found to be effective with their learning disabled students and are",
"either positive or neutral with their whole class.",
"====="
"Howard County: See also B51, Plan Ahead module, which is a problem",
}
```

"solving lesson on time management aimed at 11- to 13-year-olds who",
 "are facing more demands on their personal management skills. The module",
 "introduces a three-step process -- list, schedule, and review.",
 ""

L113 PLAIN PAPER FOR WRITING

[description:

goals =

G1<h>;

subgoals =

reading readiness, writing;

problem situation =

teacher led instruction<n>, independent work<h>, away from class<l>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<m>, some<h>, all<m>;

teaching level =

primary<h>, intermediate<n>, middle school<n>, high school<n>:]

{lernatt:

" "

"PLAIN PAPER WRITING",

" "

"Lines on primary paper may actually be a hindrance to some students.",

"Giving students unlined paper for story writing may help them to",

"express themselves more freely and worry less about being correct.",

"This approach is discussed briefly, and teachers of the youngest",

"students are encouraged to give it a try.",

" "

L114 TAPE RECORDERS FOR DICTATING IMAGINATIVE STORIES

[description:

goals =

G1<h>, G2<h>;

subgoals =

reading readiness, writing;

problem situation =

teacher led instruction<l>, independent work<h>, away from class<n>;

problem severity =

mild<m>, moderate<h>, severe<h>;

treatment scope =

one<m>, some<h>, all<n>;

teaching level =

primary<h>, intermediate<n>, middle school<n>, high school<n>:]

{lernatt:

" "

"L114 TAPE RECORDERS FOR DICTATING IMAGINATIVE STORIES",

" "

"This teaching activity recommends a technique for using tape recorders",

"to motivate young students to express themselves." The approach minimizes",

"the stress sometimes associated with writing and promotes students' sense",
"of pride in their work. Steps are given.",
"}"

L115 TEACHING LISTENING SKILLS

[description:

goals =

G1<h>;

subgoals =

listening;

problem situation =

teacher led instruction;

problem severity =

mild<m>, moderate<h>, severe<h>;

treatment scope =

one<l>, some<m>, all<h>;

teaching level =

primary<n>, intermediate<n>, middle school<h>, high school<h>:]

{lernatt:

" "

"L115 TEACHING LISTENING SKILLS",

" "

"A problem of many students, particularly those said to have attention",

"deficit disorders, is that they must learn to focus and maintain",

"attention so that they can develop academic skills. This teaching",

"activity is a step-by-step method of teaching secondary students",

"to listen for key elements. The method ties in with current events",

"instruction.",

" "

L116 LARGE GROUP PRESENTATIONS AND DISCUSSIONS

[description:

goals =

G8<h>;

subgoals8 =

classroom organization;

problem situation =

teacher led instruction<h>, independent work<n>, away from class<n>;

problem severity =

mild<h>, moderate<m>, severe<l>;

treatment scope =

one<n>, some<l>, all<h>;

teaching level =

primary<n>, intermediate<m>, middle school<h>, high school<h>:]

{lernatt:

" "

"L116 LARGE GROUP PRESENTATIONS AND DISCUSSIONS",

" "

"Approaches to managing large group lectures and discussions include",
 "using questions for active involvement, visual aids, and appropriate",
 "pacing. These approaches are described, and suggestions for dealing",
 "with misbehavior, such as clarifying rules, are discussed.",
 " "}

L117 STRUCTURING INDEPENDENT WORK

[description:

goals =

G8<h>;

subgoals8 =

classroom organization;

problem situation =

independent work<a>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<m>, some<m>, all<h>;

teaching level =

primary<m>, intermediate<m>, middle school<l>, high school<l>];

{lernatt:

" "

"L117 STRUCTURING INDEPENDENT WORK",

" "

"Independent seatwork is a much used instructional arrangement for a",
 "whole class or for part of a class, but some students' misbehavior",
 "during independent work can detract from instruction. Suggestions",
 "are given for managing student behavior while they are working on",
 "their own.",
 " "}

L118 INDIVIDUALIZED PROGRAMMING

[description:

goals =

G8<h>;

subgoals8 =

adaptations;

problem situation =

teacher led instruction<n>, independent work<h>, away from class<n>;

problem severity =

mild<m>, moderate<m>, severe<m>;

treatment scope =

one<m>, some<m>, all<l>;

teaching level =

primary<l>, intermediate<m>, middle school<m>, high school<m>];

{lernatt:

" "

"L118 INDIVIDUALIZED PROGRAMMING",

" "
 "Academic restructuring may help some students improve their class",
 "behavior. Individualization is one way to tailor instruction",
 "to the student's needs. Some suggestions are given for planning",
 "individual work that can make the process efficient and effective.",
 " "}

L119 INCREASING ATTENTIVENESS DECREASING WITHDRAWAL

[description:

goals =

G8<h>;

subgoals8 =

adaptations;

problem situation =

teacher led instruction<h>, independent work<h>, away from class<n>;

problem severity =

mild<h>, moderate<h>, severe<h>;

treatment scope =

one<h>, some<l>, all<n>;

teaching level =

primary<h>, intermediate<h>, middle school<m>, high school<m>:]

{lernatt:

" "

"L119 INCREASING ATTENTIVENESS DECREASING WITHDRAWAL",

" "

"Students act inattentive and withdrawn for physical, situational",

"and emotional reasons. Strategies for encouraging such students",

"include: relating assignments to the student's interests, giving",

"short, clear instructions, responding to and rewarding attending",

"behaviors, and involving the student in the task by self-recording",

"activities and attending behaviors.",

" "}

L120 MEETING NEEDS OF RESTLESS SOCIALLY OVERINVOLVED STUDENT

[description:

goals =

G8<h>;

subgoals8 =

adaptations;

problem situation =

teacher led instruction<h>, independent work<h>, away from class<n>;

problem severity =

mild<m>, moderate<h>, severe<m>;

treatment scope =

one<h>, some<l>, all<n>;

teaching level =

primary<h>, intermediate<h>, middle school<m>, high school<m>:]

{lernatt:

" "
"L120 MEETING NEEDS OF RESTLESS SOCIALLY OVERINVOLVED STUDENTS",
" "

"Some strategies that have proven effective with restless students",
"include: (1) legitimizing energy release, (2) clarifying and",
"articulating teacher expectations, (3) signaling the student in",
"several ways, (4) selectively attending to the student, (5) reprimanding,",
"(6) using physical placement in the classroom, (7) capitalizing on",
"social motivation by involving the student in group activities,",
"(8) using student self-monitoring techniques, and (9) contracting.",
"Steps are outlined for each of these strategies.",
" "}

L121 TEACHER VERBAL STRATEGIES

[description:
goals =
G7<h>;
subgoals7 =
questioning<h>;
problem situation =
teacher led instruction<h>;
problem severity =
mild<m>, moderate<h>, severe<m>;
treatment scope =
one<m>, some<h>, all<h>;
teaching level =
primary<h>, intermediate<m>, middle school<n>, high school<n>];
{lernatt:

" "
"L121 TEACHER VERBAL STRATEGIES",
" "

"Several strategies have been proven effective in increasing attention",
"and decreasing disruptive behavior with special populations. These",
"strategies involve teacher presentation factors, like pace of delivery",
"and verbal cues, as well as related reinforcement.",
" "}

L122 CONTINGENCY CONTRACTING

[description:
goals =
G7<h>;
subgoals7 =
motivation;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<m>;
problem severity =
mild<l>, moderate<m>, severe<h>;
treatment scope =

```

one<h>, some<m>, all<l>;
teaching level =
primary<m>, intermediate<h>, middle school<h>, high school<h>:]
{lernatt:
" "
"L122 CONTINGENCY CONTRACTING",
" "
"Contingency contracting involves developing written agreements between",
"teacher and student regarding behavioral goals and the rewards that",
"will be delivered for attainment of the goals. Examples and strategies",
"for contracting are provided.",
" "
}

```

L123 IMPROVING STUDENT MOTIVATION

```

[description:
goals =
G7<h>;
subgoals7 =
motivation;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<n>;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<l>, some<m>, all<h>;
teaching level =
primary<h>, intermediate<h>, middle school<h>, high school<m>:]
{lernatt:
" "
"L123 IMPROVING STUDENT MOTIVATION",
" "
"Motivation for classroom learning can be described as student attention",
"to lessons and engagement in learning tasks. Strategies to help",
"increase student motivation in classrooms are presented in two",
"categories: (1) strategies to establish motivation to learn and",
"(2) strategies that capitalize on existing motivation in order to",
"make academic tasks more enjoyable for students.",
" "
}

```

L124 SETTING GOALS FOR STUDENTS

```

[description:
goals =
G7<h>;
subgoals7 =
motivation;
problem situation =
teacher led instruction<h>, independent work<h>, away from class<h>;
problem severity =

```

```

mild<h>, moderate<h>, severe<h>;
treatment scope =
one<h>, some<h>, all<h>;
teaching level =
primary<h>, intermediate<h>, middle school<h>, high school<h>;]
{lernatt:
" "
"L124 SETTING GOALS FOR STUDENTS",
" "
"Goal setting is a way to help a teacher keep on track with students",
"by planning ahead and having a strategy in mind when misbehavior",
"occurs. Four steps for goal-setting are outlined.",
" "
}

```

L125 STRATEGIES TO INCREASE INVOLVEMENT

```

[description:
goals =
G7<h>, G8<m>;
subgoals7 =
questioning<h>;
subgoals8 =
classroom organization<h>;
problem situation =
teacher led instruction<h>;
problem severity =
mild<h>, moderate<h>, severe<h>;
treatment scope =
one<m>, some<h>, all<h>;
teaching level =
primary<h>, intermediate<h>, middle school<h>, high school<h>;]
{lernatt:
" "
"L125 STRATEGIES TO INCREASE INVOLVEMENT",
" "
"Students' academic success is often related to the amount of active",
"involvement they have in the classroom. Use of effective questioning",
"techniques can increase their active responding. This teaching",
"activity presents two techniques for increasing participation; these",
"techniques are: Think-Pair-Share and Every Pupil Responds.",
" "
}
)

```

```

%
demonstrations:

```

```

g1demonstration:

```

```

when
goals # G1
then
  if determined(subgoals) = true then reassert subgoals = unknown. endif.
  if determined(subgoals) = false then      subgoals = unknown. endif.
  if determined(comprehension skills) = true
  then reassert comprehension skills = unknown. endif.
  if determined(comprehension skills) = false
  then      comprehension skills = unknown. endif.
endwhen.

```

comprehensiondemon:

```

when
subgoals # comprehension
then
  if determined(comprehension skills) = true
  then reassert comprehension skills = unknown. endif.
  if determined(comprehension skills) = false
  then      comprehension skills = unknown. endif.
endwhen.

```

g7demon:

```

when
goals # G7
then
  if determined(subgoals7) = true then reassert subgoals7 = unknown. endif.
  if determined(subgoals7) = false then      subgoals7 = unknown. endif.
endwhen.

```

g8demon:

```

when
goals # G8
then
  if determined(subgoals8) = true then reassert subgoals8 = unknown. endif.
  if determined(subgoals8) = false then      subgoals8 = unknown. endif.
endwhen.

```

Redisplay Demon:

```

when

```

```

  seeagain = yes

```

```

then

```

```

  message

```

```

  .....

```

"You can obtain a printout of whatever is on the screen by simply",

"pressing the Print Screen key.", "",

"Please note that this only works if a printer is attached, turned",

"on and ready to print.", "",

"If you press the Print Screen key and nothing happens, check that",

"the printer is turned on and has paper.",

*** **

display value of learning training options.

if want = yes then

display attach lernatt of value of learning training options.

endif.

erase want.

erase seeagain.

askfor seeagain.

endwhen.

%

\ ACTIONS

actions:

display attach Cover of kb.

display attach Credit of kb.

message

" The Learning Strategy Selector contains a number of teaching",
" methods to solve problems and promote student learning in",
" verbal and mathematics skill areas, and to deal with general",
" learning or instructional problems.",

" You will be asked a series of questions designed to help the ",
" computer select the most appropriate teaching methods. ",

" Your consultation may be in the VERBAL PERFORMANCE area, the",
" MATHEMATICS area, or the GENERAL LEARNING area; or it may be",
" in a combination of these areas.",

" You will receive a list of suggested teaching methods in each",
" area of your consultation. Information on each of these methods",
" is contained in the yellow binders or boxes.",

" You will be allowed to repeat the program if you want.".

goals = G1.

obtain mg1.

if mg1 = yes then

askfor teaching level.

```

if sg1 = G1 then reassert goals = G1. endif.
if sg1 = G2 then reassert goals = G2. endif.
if sg1 = G3 then reassert goals = G3. endif.

```

message

[illegible]

display value of learning training options.

```
display attach learnatt of value of learning training options.
endif.
```

askfor seeagain.

erage goals, subgoals, comprehension skills, problem situation, problem severity, treatment scope, teaching level, learning training options, see again.

endif.

```

if determined(goals) = false then goals = G4. endif.
obtain mg2.

```

if $mg_2 = \text{yes}$ then
obtain sq_2 .

askfor teaching level.

```

if sg2 = G4 then reassert goals = G4. endif.
if sg2 = G5 then reassert goals = G5. endif.
if sg2 = G6 then reassert goals = G6. endif.

```

message

0001 0002 0003 0004 0005 0006 0007 0008 0009 0010 0011 0012 0013 0014 0015 0016 0017 0018 0019 0020 0021 0022 0023 0024 0025 0026 0027 0028 0029 0030 0031 0032 0033 0034 0035 0036 0037 0038 0039 0040 0041 0042 0043 0044 0045 0046 0047 0048 0049 0050 0051 0052 0053 0054 0055 0056 0057 0058 0059 0060 0061 0062 0063 0064 0065 0066 0067 0068 0069 0070 0071 0072 0073 0074 0075 0076 0077 0078 0079 0080 0081 0082 0083 0084 0085 0086 0087 0088 0089 0090 0091 0092 0093 0094 0095 0096 0097 0098 0099 0100

display value of learning training options.

```
display attach learnatt of value of learning training options.
endif.
```

erase want.
askfor seeagain.

erase goals, subgoals, comprehension skills, problem situation,
problem severity, treatment scope, teaching level,
learning training options, seeagain.

endif.

if determined(goals) = false then goals = G7. endif.
obtain mg3.

if mg3 = yes then
obtain sg3.

askfor teaching level.

if sg3 = G7 then reassert goals = G7.
erase subgoals7. askfor subgoals7. endif.
if sg3 = G8 then reassert goals = G8.
erase subgoals8. askfor subgoals8. endif.
if sg3 = G9 then reassert goals = G9. endif.

obtain learning training options.

message

""
"Here are some materials for you to consider."
display value of learning training options.

if want = yes then
display attach lernatt of value of learning training options.
endif.

erase want.
askfor seeagain.

endif.

askfor doagain.
if doagain = repeat then nextcase. endif.

message

""
"You have just concluded your consultation with ",
"the SNAP System Learning Strategy Selector."
""
"Thank you for trying out the SNAP System!", ""

message

""
stop.

Text Version of the Behavior Strategy Selector Knowledge Base (BEHSEL)

The following listing of the Behavior Strategy Selector knowledge base is provided for readers who are interested in expert system design or who wish to modify or adapt the knowledge base. This knowledge base conforms to the syntactical and structural rules for version 2.5 of the HT subsystem of KES (Software Architecture and Engineering).

" This goal involves motivating the student to apply work",
 " and study skills consistently to complete assignments",
 " This goal focuses on work skills that the student has ",
 " acquired but does not apply consistently. In contrast,"
 " Goal 3 'Develop Work Skills' focuses on teaching the",
 " student new work skills that he/she has never learned.",
 " Both goals can be used in combination."

Workskills Explanation:

" Goal 3. Develop Work Skills",
 " This goal involves helping the student acquire or improve",
 " the study, planning, and/or organizational skills needed",
 " to complete assignments and manage school work",
 " This goal focuses on teaching the student work skills",
 " that he/she has never learned. In contrast, Goal 2 ",
 " 'Improve Work Habits' focuses on motivating the student",
 " to apply work skills that he/she has already learned.",
 " Both goals can be used in combination."

Attpunc Explanation:

" Goal 4. Improve Attendance and Punctuality",
 " This goal involves strategies aimed at establishing and",
 " encouraging attendance and punctuality. It is generally",
 " a high priority goal when present."

Socialskills Explanation:

" Goal 5. Develop Social Skills",
 " This goal involves teaching the social skills needed for",
 " interaction with peers and teachers. It may be ",
 " applicable for the withdrawn student who does not",
 " interact, and also for the student who interacts in ",
 " inappropriate ways (such as bullying, obnoxious, etc.).",
 " This goal focuses on actually teaching social skills to ",
 " the student. In contrast, Goal 6 'Encourage Social ",
 " Development' focuses on encouraging the student and/or",
 " giving the student opportunities to use and refine ",
 " social skills already learned. Both goals can be used",
 " in combination."

Socialdevel Explanation:

" Goal 6. Encourage Social Development",
 " This goal involves encouraging and refining social skills",
 " that the student has already acquired. It may be ",
 " applicable when the student is not applying the social",
 " skills in the full range of situations required, or when",
 " social growth is not occurring satisfactorily, or when",
 " the student must be prepared for a new social situation",
 " or when the student is fearful of social situations.",
 " This goal focuses on encouraging the student to apply and",
 " refine social skills already learned. In contrast, ",
 " Goal 5 'Develop Social Skills' focuses on teaching new",
 " social skills. Both goals can be used in combination."

Esteem Explanation:

" Goal 7. Improve Self Esteem",
 " This goal is directed toward helping a student gain and",
 " exhibit self-confidence and positive self-perceptions",

" in personal, social and academic activities. Poor self",
 " esteem can be evidenced in a number of ways, including ",
 " self-criticism, withdrawal, and apparent apathy.",
 " For a student who is having academic or social",
 " difficulties in school, the best way to improve self",
 " esteem may be to improve the student's academic or ",
 " social competence."

Immature Explanation:

" Goal 8. Increase Maturity and Emotional Adjustment",
 " This goal involves encouraging age-appropriate and ",
 " situation-appropriate behavior, and promoting emotional",
 " adjustment. It covers a wide range of problems,",
 " including some that are mild and easy to remedy, and ",
 " others that are symptomatic of more severe problems.",
 " The techniques included in this computer program can be",
 " applied in the context of the regular classroom program.",
 " Severe problems of immaturity and poor emotional",
 " adjustment may need to be dealt with by specialized",
 " personnel."

Disr Explanation:

" Goal 9. Decrease Disruptive Behavior",
 " This goal involves decreasing behavior that disrupts",
 " others' work or interferes with classroom operations.",
 " Such behavior may arise from a variety of causes, and ",
 " this goal is often used in combination with other goals",
 " although it can also be used alone."

Aggr Explanation:

" Goal 10. Decrease Aggressive Behavior",
 " This goal involves decreasing verbal or physical",
 " aggression directed at peers, teachers or objects.",
 " Obviously, problems of this nature can be serious, and",
 " the computer tends to treat this as a high priority goal",
 " whenever it is indicated."

\GET HELP MESSAGE

Get Help Message:

LCS, "", "", Star Line, Star Line, "", "",
 " Since this problem involves a threat of physical ",
 " harm to the student or another person, it is ",
 " strongly recommended that you consult with an",
 " appropriate person in your school or district.",
 " You might consider talking to a School Psychologist",
 " Counselor, Principal or Assistant Principal, Crisis",
 " Intervention Team or Teacher Assistance Team.",
 " This SNAP consultation will continue, but please",
 " remember this recommendation.",
 " "", "", Star Line, Star Line.

%

text:

{Cover:

LCS,

"

BEHAVIOR STRATEGY SELECTOR",

""

" By David B. Malouf, Carolyn M. Fink & Virginia H. Pilato ",

"

"Developed by the SNAP System Project, Institute for the Study",

"of Exceptional Children and Youth, University of Maryland-- ",

"College Park, MD, 20742.",

""

"Developed with KES HT software from Software Architecture and",

"Engineering, Inc. Arlington VA.",

""

"This product was developed under grant G008730016 from the ",

"United States Department of Education. However, the contents",

"do not necessarily reflect the policy of the Department of ",

"Education, and no official endorsement should be inferred. ",

""

{Credit:

LCS,

"

PLEASE NOTE:",

""

" The KES runtime software and license for the SNAP",

" System have been provided without charge by Software",

" Architecture and Engineering, 13100 Worldgate Drive,",

" Suite 340, Herndon VA 22070-4382.",

""

" The following conditions apply to the use of this",

" software and license:",

""

" 1. Distribution is limited to this application (SNAP System).",

" 2. Distribution is limited to educational institutions.",

" 3. No portion of the KES development system is included in",
" this distribution.",

" 4. This distribution does NOT include any support from Software",
" Architecture and Engineering to SNAP System users.",

""

%

attributes:

\EXECUTION CONTROL

Update:str [default: "June 1991"].

goalfile:str.

filenumber:int.

Immature And Emotional Ask Stop: sgl (yes,no).

Social Ask Stop: sgl (yes,no).

Get Help Stop:sgl (yes,no).

Appropriate Only: sgl (yes,no).

Proceed OK: sgl (yes,no).

Display Goals:sgl (yes,no).

Confirm Goals:str

{question:

"Type X for a goal explanation, R to revise a goal priority, P to proceed."}

Which Goal Explained:int

{question:

"Type the number of the goal you want explained."}

Which Goal Changed:int

{question:

"Type the number of the goal you want to change."}

Seeagain:sgl

(yes,no)

{question:

LCS,

" Would you like to see the list of suggested materials again?",""

" You may see the list and the descriptions as many times as you",

" want.", "",

" Answer yes if you want to obtain a printout.", ""}.

Doagain:sgl

(repeat

{question: "Repeat the Behavior Strategy Selector."},

quit

{question: "Leave the Behavior Strategy Selector and return to",

" the main menu."})

{question:

LCS,

"What would you like to do now?"}

Want: sgl

(yes, no)

{question:

"Would you like to see a short description of the selected interventions?"}

\TRANSITION VARIABLES FOR GOALS AND APPROACHES USED IN ADVISOR

At:str.

Att:str.

Wh:str.

Wht:str.

Ws:str.

Wst:str.

Ap:str.

Apt:str.

Ss:str.

Sst:str.

Sd:str.

Sdt:str.
 Im:str.
 lmt:str.
 Es:str.
 Est:str.
 Di:str.
 Dit:str.
 Ag:str.

Man:str.
 Mant:str.
 Ct:str.
 Ctt:str.
 Bm:str.
 Bmt:str.
 Af:str.

\ INPUT ATTRIBUTES

\ NEEDS THAT SHOULD BE ADDRESSED BY THE TRAINING OPTIONS.

*Needs: mlt

(distracted
 {question: "seem inattentive or distractible or uninterested in",
 " school work."},
 disturbs
 {question: "disturb other students' work or disrupt activities."},
 fights
 {question: "are verbally or physically aggressive or destructive."},
 work
 {question: "fail to complete tasks or work carelessly or are very",
 " disorganized."},
 tardy truant
 {question: "are late or absent excessively."},
 social
 {question: "are socially inappropriate or withdrawn with other students",
 " or teachers."},
 immature emotional
 {question: "act immature or seem to have emotional problems (such as",
 " low self-esteem, depression, instability, etc)."}))
 {question:
 LCS,
 Select Several,
 " Which of the following are components of the problem? ",
 " Select all that apply.", "",
 " One or more students:"}.

*Problem Situations: mlt

(teacher led instruction
 {question: "during teacher led instruction."},
 individual work

{question: "during individual classroom work, such as",
 " individual projects or seatwork."},
 group work
 {question: "during small group or cooperative learning activities."},
 away from class
 {question: "away from the structured classroom situation, such as",
 " at recess or outside play time, between classes, before",
 " and after school, at work experience sites, or at home."},
 transitions
 {question: "during classroom transitions, including the beginning",
 " and end of class."},
 unsure OR none
 {question: "unsure or none of the above."})

{question:
 LCS,
 Select Several,
 " The problem tends to occur:", ""}.

*Work Type:sgl (yes,no)

{question:
 LCS,
 Select One,
 " Is the type of task a major influence in this problem?", "",
 " For example, does it occur...:", "",
 " * only during instruction on certain topics, or",
 " * only when tasks are unfamiliar, or",
 " * only when certain types of assignments are given?", ""}.

*High Low:sgl (yes,no)

{question:
 LCS,
 Select One,
 " Does the problem appear to be caused by the fact that",
 " some students are more advanced than others?", "",
 " For example, does it seem to occur...:", "",
 " * when the faster students are done with work and are",
 " waiting for the other students to finish, or",
 " * when some students encounter difficulty and become",
 " frustrated or confused, or",
 " * when some students understand the material and others",
 " do not?", ""}.

*Peer Influence:sgl (yes,no)

{question:
 LCS,
 Select One,
 " Are classmates a major factor in the occurrence of this",
 " problem?", "",
 " For example, do other students...:", "",
 " * incite the problem, or",
 " * give approval or attention, or",

- " * get involved in arguments or fights, or",
- " * join in when the problem occurs?", ""}.

*Problem Scope:sgl

(one
 {question: "Just one student."},
 some
 {question: "A number of students. (Some of these students",
 " may have the problem worse than others.)"},
 all
 {question: "Most of the students either have the problem",
 " or occasionally become involved with it."})

{question:
 LCS,
 Select One,
 " How many students have the problem?", ""}.

*Problem Severity:sgl

(mild
 {question: "The problem is relatively mild at this point but",
 " needs attention before it gets worse.", ""},
 moderate
 {question: "The problem interferes with instructional",
 " and/or social processes.", ""},
 severe
 {question: "The problem is creating other major problems",
 " or disruptions for one or more students.", ""},
 extreme
 {question: "The problem may result in physical or",
 " psychological injury or other serious",
 " and long term consequences."})

{question:
 LCS,
 Select One,
 " How serious is the problem?", "",
 " Select the best answer.", ""}.

*Teaching Level:sgl

(primary
 {question: "primary (grades k through 3)"},
 intermediate
 {question: "intermediate (grades 4 through 6)"},
 middle school
 {question: "middle school or junior high school"},
 high school
 {question: "senior high school or adult"})

{question:
LCS,
Select One,
" What grades do you teach?", ""}.

*Prior Efforts:sgl

(little
{question: "Using SNAP is my first attempt at dealing with the",
" problem.", ""},
some
{question: "I've tried two or three approaches like changing",
" seating arrangements or talking to a colleague, but I",
" need other ideas.", ""},
lots
{question: "I've made a major effort for an extended period of time."})

{question:
LCS,
Select One,
" What have you done to deal with this problem?", ""}.

\Needs specifications

*Work Problems:sgl

(never
{question: "I HAVE NEVER SEEN the problem student(s) engage in",
" the work-related behaviors at a satisfactory level.",
" The student(s) may not know how.", ""},
sometimes
{question: "I HAVE SEEN the problem student(s) engage in",
" the work-related behaviors at a satisfactory level.",
" The problem is getting the student(s) to do it",
" consistently.", ""},
both
{question: "Both 1 & 2 apply to some of the problem students.", ""},
seelist
{question: "I would like to see a list of some possible work-",
" related behaviors before answering this question."})

{question:
LCS,
Select One,
" You answered that one or more students do not complete tasks",
" or work carelessly or are very disorganized. Think of the",
" work-related behavior you expect of your students and SELECT",
" THE ONE STATEMENT WHICH IS MOST ACCURATE.", ""}.

*Social Problems:mlt

(never
{question: "almost never socialize or play with other students."},

sometimes

{question: "socialize or play in very limited situations (such as",
" only with a few peers, only with teacher nearby, etc.)."},

fear

{question: "seem to fear interacting with other students."},

inappropriate

{question: "interact with other students in inappropriate ways."},

perceptions

{question: "don't discriminate the appropriate social behaviors",
" for different situations."},

emotional

{question: "have inappropriate emotional reactions (such as",
" crying, sulking, etc.) in social situations."},

none

{question: "none of the above."})

{question:

LCS,

Select Several,

" SOCIAL PROBLEMS:"",

" Select all of the following that apply. The problem student(s):", "").

*Teacher Problems:mlt

(avoidance

{question: "avoid contact with teachers to an extreme degree."},

resistant

{question: "are very resistant and noncompliant with teachers."},

aggressive

{question: "are threatening or aggressive toward teachers."},

none

{question: "none of the above."})

{question:

LCS,

Select Several,

" PROBLEMS WITH TEACHERS:"",

" Select all of the following that apply. The problem student(s):", "").

*Immature And Emotional Problems:mlt

(helpless

{question: "act helpless or refuse to solve their own problems."},

bizarre

{question: "do or say things that are very strange."},

suicide talk

{question: "talk about suicide or deliberate self-injury"},

emotional

{question: "seem too emotional or sensitive or immature."},

negative talk

{question: "engage in an excessive amount of self criticism."},

poor self care
 {question: "exhibit poor self care and hygiene."},
 apathy
 {question: "seem apathetic or have no interest in things."},
 self injury
 {question: "engage in or attempt deliberate self injury."},
 ashamed
 {question: "seem ashamed of self."},
 social
 {question: "react inappropriately in social situations."},
 *none
 {question: "None of the above."})

 {question:
 LCS,
 Select Several,
 " EMOTIONAL ADJUSTMENT AND MATURITY:",
 " Do any of these statements apply to the problem you've selected?" "",
 " The problem student(s):".}

\\FOLLOW-UP QUESTION TO CONFIRM PHYSICAL THREAT

Get Help Followup:sgl

(yes,no)
 {question:
 LCS,
 " Does this problem represent a threat of physical harm to",
 " anybody at this point?" "", "", ""}.

\\NEEDS SCORES

Disruption Aggression Score:real [default: 0].
 Work Score:real [default: 0].
 Social Score:real [default: 0].
 Immature Emotional Score: real [default: 0].
 Esteem Score: real [default: 0].
 Affective Score: real [default: 0].

\\APPROACH SCORES

\\General Classroom Management Score: real.
 Change Tasks Score:real.
 \\Management Score: real.

\\THESE ARE THE GOALS THAT SHOULD BE ATTAINED BY APPLYING THE TROPTS.

\\ Increase attention and involvement
 Atten:sgl
 (high {question: "High priority goal"},
 medium {question: "Medium priority goal"},
 no {question: "Not a selected goal"})

```

    {question: Atten Statement,"      Choose a priority:"}.
\ Improve work habits
  Workhabits:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Workhabits Statement,"      Choose a priority:"}.
\ Develop work skills
  Workskills:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Workskills Statement,"      Choose a priority:"}.
\ Improve attendance and punctuality
  Attpunc:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Attpunc Statement,"      Choose a priority:"}.
\ Develop social skills **new to BEHADV
  Socialskills:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Socialskills Statement,"      Choose a priority:"}.
\ Encourage social development **new to BEHADV
  Socialdevel:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Socialdevel Statement,"      Choose a priority:"}.
\ Improve self esteem **new to BEHADV
  Esteem:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Esteem Statement,"      Choose a priority:"}.
\ Increase Maturity and Emotional Adjustment
  Immature:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Immature Statement,"      Choose a priority:"}.
\ Decrease disruptive behavior
  Disr:sgl
  (high {question: "High priority goal"},
   medium {question: "Medium priority goal"},
   no {question: "Not a selected goal"})
  {question: Disr Statement,"      Choose a priority:"}.
\ Decrease aggressive behavior
  Aggr:sgl
  (high {question: "High priority goal"},

```

medium (question: "Medium priority goal"),
no (question: "Not a selected goal"))
{question: Aggr Statement," Choose a priority:"}.

Goal Count: int

[default: istru (Atten # no) + istru (Workhabits # no) +
istru (Workskills # no) + istru (Attpunc # no) +
istru (Socialskills # no) + istru (Socialdevel # no) +
istru (Esteem # no) + istru (Immature # no) +
istru (Disr # no) + istru (Aggr # no)].

\COMBINED GOALS ATTRIBUTE -- All goals in single attribute

Subgoals:mlt

(atten, workhabits, workskills, attpunc, socialskills, socialdevel,
esteem, immat, disr, aggr).

\GENERAL APPROACHES TO ATTAIN GOALS

Management:sgl (yes,no).

Change Tasks:sgl (yes,no).

Affective:sgl (yes,no).

Approach Count: int

[default: istru (Management = yes)
+ istru (Change Tasks = yes)
+ istru (Affective = yes)].

\COMBINED APPROACHES ATTRIBUTE

Type: mlt

(management,academic modification,affective).

\INTERMEDIATE ATTRIBUTES USED IN SELECTING TRAINING OPTIONS

*Punitive:sgl (yes,no).

*Effort Intrusion:sgl (mild, moderate, extensive).

*Group Process:sgl (yes,no).

*Independent Work Needs:sgl (yes,no).

*Classroom Management Needs:sgl (yes,no).

*General Social Goals:sgl (yes,no).

*Withdrawn Social Needs:sgl (yes,no).

Motivation Needs Score: int.

*Motivation Needs:sgl (yes,no).

Behavior Training Options:mlt

(B1 PRINCIPLES OF REINFORCEMENT

[description: \checked 3/1/90

Subgoals =

disr<h>, aggr<m>, atten<h>, workhabits<m>, attpunc<m>;

Type = management<a>;

Problem Situations =

teacher led instruction<h>, individual work<h>, group work <m>,
transitions<m>, away from class<m>;

Problem Severity =

mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope =

one<m>, some<m>, all<m>;

Effort Intrusion =

mild<a>;

Teaching Level =

primary<h>, intermediate<h>, middle school<m>, high school<m>;]

{behatt:

" "

"B 1 PRINCIPLES OF REINFORCEMENT",

" "

"Reinforcement of desired student behavior is a fundamental behavior",

"management technique. These materials provide a broad overview of",

"effective reinforcement along with classroom examples and some steps",

"to follow in the use of social, activity, and tangible reinforcers.",

"Also included is a reading describing what behavior modification is",

"and is not.",

"").

B2 CHANGING CLASSROOM ENVIRONMENT TO MEET STUDENT NEEDS

[description: \checked 2/22/90

Subgoals = disr<h>, atten<h>, workhabits<h>;

Type = management<a>;

Problem Situations =

individual work<h>, group work<m>, teacher led instruction<m>,

transitions<h>;

Problem Severity =
mild<h>, moderate<h>, severe<n>, extreme<n>;

Problem Scope =
one<n>, some<m>, all<m>;

Effort Intrusion =
moderate<a>;

Teaching Level =
primary<h>, intermediate<h>, middle school<n>, high school <n>;

\EXTRA SPECIFICATIONS

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B2 CHANGING ENVIRONMENT TO MEET STUDENT NEEDS",

" "

"Assessing classrooms and making small changes in physical settings can",
"modify some student behavior alone or in combination with other management",
"strategies. An environmental checklist is provided to help teachers",
"analyze their use of space.",

" "}

B3 MANAGING SURFACE BEHAVIOR

[description: \checked 2/22/90

Subgoals = discr<h>, aggr<m>, atten<h>, immat<l>;

Type = management<a>, affective;

Problem Situations = teacher led instruction<h>, individual work<h>,
group work<h>, transitions<h>, away from class<l>;

Problem Severity =
mild<h>, moderate, severe<l>, extreme<n>;

Problem Scope =
all, some, one<n>;

Effort Intrusion =
mild<h>, moderate<m>;

Teaching Level =
primary<h>, intermediate<h>, middle school<m>, high school<l>;

\EXTRA SPECIFICATIONS

Classroom Management Needs = yes<a>:]

{behatt:

"B3 MANAGING SURFACE BEHAVIOR",

" "

"This paper describes approaches to behavior management that are not",

"based on behavior modification principles. These approaches focus",

"on behavior, but they also consider internal psychological processes.",

"Four major alternatives to handling misbehavior are 1) permitting,",

"2) tolerating, 3) interfering, and 4) preventive planning. The goal",

"is to find the right combination of techniques for each student.",

"Guidelines are given for how and when to use these techniques.",

" "}

B4 TIME OUT

[description: \checked 2/22/90

Subgoals =

disr<h>, aggr<h>, immat<n>, esteem<n>, socialskills<n>, sociallevel<n>;

Type= management<a>;

Problem Situations =

teacher led instruction<m>, individual work<m>, group work<m>,

transitions<m>, away from class<l>;

Problem Severity =

mild<n>, moderate<n>, severe<h>, extreme<h>;

Problem Scope =

all<n>, some <n>, one;

Punitive =

yes<a>;

Effort Intrusion =

mild <n>, moderate<n>, extensive<h>;

Teaching Level =

primary<h>, intermediate<m>, middle school<l>, high school<l>;

\ EXTRA SPECIFICATIONS:

Immature And Emotional Problems = suicide talk<n>, emotional<n>,

negative talk<n>, apathy<n>, self injury<n>, ashamed<n>;

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B4 TIME OUT",

" "

"The basic idea behind time-out is to give a misbehaving student",
"time out' from positive reinforcement. There are different ways",
"to accomplish this time out, including simply ignoring the student",
"(nonseclusionary), contingent observation (exclusionary), and ",
"removal of the student (seclusionary). These methods are described",
" and guidelines are provided for their use.",

" }

B5 INCREASING POSITIVE INTERACTIONS

{description: \checked 2/22/90

Subgoals = discr<l>, aggr<l>, esteem, immat;

Type = affective<h>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<h>,
away from class<h>, transitions<h>;

Problem Severity =
mild<h>, moderate<m>, severe<l>, extreme<n>;

Problem Scope =
one<l>, some<h>, all<m>;

Effort Intrusion =
mild<h>, moderate<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS:

Teacher Problems = none<n>:]

{behatt:

" "

"B5 INCREASING POSITIVE INTERACTIONS",

" "

"The teacher is a very important person in the life of the student.",
"This training option gives teachers concrete ways to focus on the",
"strengths of their students. The usual outcome of this approach is",
"that students' behavior improves, more learning occurs and self-",
"esteem improves.",

" "}

B6 TEN STEPS TO GOOD DISCIPLINE

[description: \checked 2/22/90

Subgoals = discr<h>, workhabits, aggr<h>, attpunc<h>;

Type= management<a>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<m>,
away from class <m>, transitions<h>;

Problem Severity =
mild<n>, moderate<l>, severe<m>, extreme<m>;

Problem Scope =
one<n>, some<n>, all;

Effort Intrusion =
mild<n>, moderate, extensive;

Teaching Level =
primary<n>, intermediate<m>, middle school<h>, high school<h>:]

{behatt:

" "

"B6 TEN STEPS TO GOOD DISCIPLINE",

" "

"The ten step program that Glasser describes as 'constructive, no-nonsense',
'non-punitive' is called 'Reality Therapy' and is a school-wide",
'approach to dealing with discipline problems. The ten steps are',
'described and general suggestions are provided: be personal, refer to',
'present behavior, do not use value judgments, plan alternatives, be',
'committed, don't accept excuses, do not punish, and never give up.',
""}

B7 EFFECTIVE PUNISHMENT

[description: \checked 2/22/90

Subgoals = discr<h>, aggr<h>, immat<n>, esteem<n>;

Type= management<a>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<h>,
away from class<m>, transitions<h>;

Problem Severity =

mild<n>, moderate<m>, severe<h>, extreme<h>;

Problem Scope =

one<h>, some<m>, all<l>;

Punitive =

yes<a>;

Effort Intrusion =

mild<n>, moderate<h>, extensive<h>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<m>;

\ EXTRA SPECIFICATIONS:

Teacher Problems = avoidance<n>:]

{behatt:

" "

"B 7 EFFECTIVE PUNISHMENT",

" "

"The term 'punishment' applies to something that follows a behavior",
"and reduces the likelihood that the behavior will reoccur. Punishment",
"can change student behavior quickly, but there are some drawbacks.",
"These drawbacks are explained and guidelines for the effective use of",
"punishment are given.",
" "},

B8 LARGE GROUP PRESENTATIONS AND DISCUSSIONS

[description: \checked 2/22/90

Subgoals =

disr<h>, atten<h>, workhabits<m>;

Type= management<a>;

Problem Situations =

teacher led instruction<a>, away from class<n>;

Problem Severity =

mild<h>, moderate, severe<l>, extreme<n>;

Problem Scope =

one<n>, some, all<h>;

Effort Intrusion =

mild<h>, moderate;

Teaching Level =

primary<n>, intermediate<m>, middle school<m>, high school;

\ EXTRA SPECIFICATIONS:

Work Type = yes<a>:]

{behatt:

" "

"B8 LARGE GROUP PRESENTATIONS AND DISCUSSIONS",

" "

"Approaches to managing large group lectures and discussions include",

"using questions for active involvement, visual aids, and appropriate",

"pacing. These approaches are described and suggestions for dealing",

"with misbehavior, such as clarifying rules, are discussed.",

" "}

B9 STRUCTURING INDEPENDENT WORK

[description: \checked 2/23/90

Subgoals = workhabits<m>, discr<m>, atten<h>, aggr<n>;

Type= academic modification<h>, management<h>;

Problem Situations = individual work<a>;

Problem Severity = mild<h>, moderate<m>, severe<m>, extreme<l>;

Problem Scope = one<n>, some<h>, all<h>;

Effort Intrusion = mild<h>;

Teaching Level = primary<h>, intermediate<h>, middle school<l>,
high school<l>:]

{behatt:

" "

"B9 STRUCTURING INDEPENDENT WORK",

" "

"Independent seatwork is a much used instructional option for a whole class",

"or mixed with small group work, but some students' misbehavior during",

"independent work can detract from instruction. Suggestions are given for ",

"managing student behavior while they are working on their own.",

" "}

B11 ESTABLISHING CLASSROOM RULES

[description: \checked 2/23/90

Subgoals = discr<h>, atten<h>, workhabits<h>, attpunc<h>;

Type = management<a>;

Problem Situations = teacher led instruction<h>, individual work<h>, group work<h>, transitions<m>;

Problem Severity = mild<h>, moderate<m>, severe<l>, extreme<n>;

Problem Scope = one<l>, some<h>, all<h>;

Effort Intrusion = mild<h>, moderate<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<m>, high school<m>;

\ EXTRA SPECIFICATIONS

Group Process = yes<a>;

Classroom Management Needs = yes<a>;]

{behatt:

" "

"B11 ESTABLISHING CLASSROOM RULES",

" "

"Student off-task behavior results in an estimated 15-25% loss in",
"instructional time. Both students and teachers function best when limits",
"and expectations are clearly defined and agreed upon. Six elements of the",
"social contract (rule-making) between students and teachers are outlined. ",

"B11 PREVENTIVE DISCIPLINE",

\ " "

"Some student behavior problems can be prevented, and switching",
"from 'reactive' to 'preventive' discipline can benefit both",
"students and teachers. These materials present a variety of ",
"approaches to preventive discipline.",
" "}

B12 TEACHER VERBAL STRATEGIES

[description: \checked 2/23/90

Subgoals = atten<h>, workhabits<h>, immat<m> ;

Type= academic modification<h>, management<h>;

Problem Situations = teacher led instruction<a>, away from class<n>;

Problem Severity = mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope = one<n>, some<m>, all<h>;

Effort Intrusion = mild<h>, moderate<h>;

Teaching Level =
primary<h>, intermediate<m>, middle school<l>, high school<l>;

\ EXTRA SPECIFICATIONS

Work Type = yes<a>;
Classroom Management Needs = yes<a>:]
{behatt:
" "
" "
"B12 TEACHER VERBAL STRATEGIES",
" "
" "
"Several strategies have been proven effective in increasing attention and",
"decreasing disruptive behavior with special populations. These strategies",
"involve teacher presentation factors, like pace of delivery and verbal",
"cues, as well as related reinforcement.",
" "}

B13 CONFLICT RESOLUTION

[description: \checked 2/23/90

Subgoals = aggr<h>, socialskills<h>, socialdevel<m>;

Type = management<a>;

Problem Situations =
teacher led instruction<m>, individual work<l>, group work<h>,
away from class<m>, transitions<m>;

Problem Severity =
mild<h>, moderate<m>;

Problem Scope =
one<l>, some<m>, all<h>;

Effort Intrusion = mild<n>, moderate<h>, extensive<m>;

Teaching Level =
primary<n>, intermediate<l>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Group Process = yes<a>;

Social Problems = none<n>, fear<h>, inappropriate<h>:]

{behatt:
" "
" "
"B13 CONFLICT RESOLUTION",
" "
" "

"Learning about conflict may help students manage their own problems.",
 "Conflict can be presented as a part of personal and world situations",
 "with the goal of understanding the nature of constructive problem",
 "solving. Some example activities are presented.",
 " "},

B14 REDUCING STRESS OF STUDENTS IN CONFLICT

[description: \checked 2/23/90

Subgoals = discr<h>, aggr<h>, socialskills<m>, socialdevel<h>,
 esteem<h>, immat;

Type= affective<a>;

Problem Situations =
 teacher led instruction<m>, individual work<m>, group work<m>,
 transitions<m>, away from class<m>;

Problem Severity = mild<m>, moderate<m>, severe<h>, extreme<m>;

Problem Scope = one<h>, some<m>, all<n>;

Effort Intrusion = mild<m>, moderate<h>;

Teaching Level =
 primary<m>, intermediate<h>, middle school<h>, high school<h>:]
 {behatt:

" "
 "B14 REDUCING STRESS OF STUDENTS IN CONFLICT",
 " "

"Students' behavior can be especially difficult to manage when they",
 "are in crisis or under stress. The article provided suggests eight",
 "strategies a teacher can use to help students cope with emotional",
 "stresses.",
 " "}

B15 CONTINGENCY CONTRACTING

[description: \checked 2/23/90

Subgoals = discr<h>, aggr<m>, workhabits<h>, workskills<m>,
 socialskills<m>, attpunc<h>;

Type= management<a>;

Problem Situations = teacher led instruction, individual work,
 group work, away from class<h>, transitions<m>;

Problem Severity = mild<l>, moderate<m>, severe<m>, extreme<m>;

Problem Scope = one<h>, some<m>, all<n>;

Effort Intrusion = mild<n>, moderate<h>, extensive <h>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<h>:]

{behatt:

" "

"B15 CONTINGENCY CONTRACTING",

" "

"Contingency contracting involves developing written agreements between",

"teacher and student regarding behavioral goals and the rewards that",

"will be delivered for attainment of the goals. Examples and strategies",

"for contracting are provided.",

" "}

B16 PREVENTIVE DISCIPLINE IN EARLY CHILDHOOD

[description: \checked 2/23/90

Subgoals = discr<m>, atten<h>, workhabits<h>;

Type = management<a>;

Problem Situations = teacher led instruction<h>, individual work<h>,
group work<m>, transitions<m>;

Problem Severity =

mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope = one<l>, some<m>, all<h>;

Effort Intrusion = mild<h>;

Teaching Level =

primary<h>, intermediate<l>, middle school<n>, high school<n>;

\ EXTRA SPECIFICATIONS

Group Process = yes<a>;

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B16 PREVENTIVE DISCIPLINE IN EARLY CHILDHOOD",

" "

"Classroom strategies for preventing possible behavior problems in",

"young children include establishing clear rules and routines, varying",

"teaching modes, and reinforcing good behavior. Preventing behavior",

"problems can maximize instructional time and provide a positive classroom",

"atmosphere. This training option includes a description of preventive",
"techniques.",
" "}

B17 GROUP CONTINGENCIES

[description: \checked 2/23/90

Subgoals =
disr<h>, aggr, atten<m>, workhabits<h>, socialdevel<h>, attpunc<m>;

Type= management<a>;

Problem Situations = teacher led instruction<m>, individual work<m>,
group work<h>, away from class<m>, transitions<m>;

Problem Severity = mild<m>, moderate<h>, severe<m>, extreme<n>;

Problem Scope = one<m>, some<h>, all<h>;

Effort Intrusion = mild<n>, moderate<h>, extensive<m>;

Teaching Level =
primary<h>, intermediate<h>, middle school<h>, high school<m>;

\ EXTRA SPECIFICATIONS

Group Process = yes<a>:]

{behatt:

" "

"B17 GROUP CONTINGENCIES",

" "

"Group contingencies can be effective in changing individual and group",
"behavior by making use of social reinforcement in the peer group in a",
"variety of settings. Group contingencies are defined as group or",
"individual behavior performed for group reinforcement. General information",
"and two examples of classroom group contingencies are provided.",
" "}

B18 PRAISE GOOD BEHAVIOR AND IGNORE BAD BEHAVIOR

[description: \checked 3/1/90

Subgoals = disr, atten, workhabits, esteem<m>;

Type= management<a>, affective;

Problem Situations =
away from class<l>, teacher led instruction<h>, individual work<h>,
group work<h>, transitions<h>;

Problem Severity =
extreme<n>, severe<n>, moderate, mild<h>;

Problem Scope =
one<m>, some<h>, all<h>;

Effort Intrusion =
mild<h>, moderate<n>, extensive<n>;

Teaching Level =
primary<h>, intermediate<h>, middle school<l>, high school<n>;

\ EXTRA SPECIFICATIONS

Teacher Problems = none<a>;
Classroom Management Needs = yes<a>;]

{behatt:

" "

"B18 PRAISE GOOD BEHAVIOR AND IGNORE BAD BEHAVIOR",

" "

"In the classroom, a major alternative to punishment is ignoring misbehavior.",
"One article in this training option explains how to recognize and ignore",
"behavior that is intended to get teacher attention. Often accompanying ",
"ignoring is praising good behavior. A caution against the overuse of praise",
"is presented in the other article in this training option.",

" "}

B19 SETTING GOALS FOR STUDENTS

[description: \checked 2/23/90

Subgoals = disr, workhabits<h>, workskills<m>, socialdevel<m>,
socialskills, attpunc;

Type= management<a>;

Problem Situations =
teacher led instruction, individual work, transitions,
group work, away from class;

Problem Severity = mild<h>, moderate, severe<n>, extreme<n>;

Problem Scope = one<n>, some, all<h>;

Effort Intrusion = mild<n>, moderate<h>, extensive<m>;

Teaching Level =
primary, intermediate, middle school, high school;]

{behatt:

" "

"B19 SETTING GOALS FOR STUDENTS",

" "

"Goal setting is a way to help a teacher keep on track with students",

"by planning ahead and having a strategy in mind when misbehavior occurs.",

"Four steps for goal-setting are outlined.",

" "}

B20 SELF MONITORING ACADEMIC PROGRESS

[description: \checked 2/23/90

Subgoals = workhabits<h>, workskills<h>;

Type= management, academic modification;

Problem Situations = individual work<h>, group work<h>, away from class;

Problem Severity = mild<m>, moderate<h>, severe<n>, extreme<n>;

Problem Scope = one<h>, some<m>, all<m>;

Effort Intrusion = mild<n>, moderate<n>, extensive<m>;

Teaching Level =

primary<m>, intermediate<h>, middle school<m>, high school<n>;

\ EXTRA SPECIFICATIONS

Independent Work Needs = yes<a>:]

{behatt:

" "

"B20 SELF-MONITORING ACADEMIC PROGRESS",

" "

"Techniques of self-management can be taught to students to help them",

"achieve in areas such as attendance, math, and story writing.",

"Self-monitoring techniques described in this training option are:",

"self-recording and self-checking.",

" "}

B21 STUDENT SELF MONITORING BEHAVIOR

[description: \checked 2/27/90

Subgoals = workskills<m>, workhabits, discr<h>, atten<h>,
aggr<l>, attpunc<h>;

Type= management<a>;

Problem Situations = teacher led instruction<m>, individual work<h>,

transitions<h>, away from class<m>;

Problem Severity = mild<l>, moderate<h>, severe<n>, extreme<n>;

Problem Scope = one<h>, some<l>, all<n>;

Effort Intrusion = mild<n>, moderate<n>, extensive<m>;

Teaching Level =

primary<m>, intermediate<h>, middle school<h>, high school<h>;

Independent Work Needs = yes<a>;

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B21 STUDENT SELF-MONITORING BEHAVIOR",

" "

"Self-mediated procedures are those that put the responsibility for",

"behavior in the hands of the student with teacher supervision.",

"Self-control procedures that have been shown to be successful with",

"disruptive students include self-monitoring and self-instruction.",

"A description and several examples are given.",

" "}

B22 CONFERENCING WITH STUDENTS AND PARENTS

[description: \checked 2/27/90

Subgoals = disr<h>, aggr<h>, immat<h>;

Type= affective <a>;

Problem Situations = teacher led instruction, individual work,
group work<h>, away from class<h>, transitions;

Problem Severity = mild<l>, moderate<h>, severe<h>, extreme<m>;

Problem Scope = one<h>, some<m>, all<l>;

Effort Intrusion = mild<n>, moderate, extensive<h>;

Teaching Level =

primary, intermediate, middle school, high school;]

{behatt:

" "

"B22 CONFERENCING WITH PARENTS AND STUDENTS",

" "

"Conferences can be a very important part of a behavior management plan.",

"Open and clear communication is the key to successful conferences with ",

"students and parents. General guidelines are given in one article and",

"a specific technique, Life Space Interviewing, is described in ",
"another article.",
" "}

B23 ATTENDING TO STUDENT FEELINGS

[description: \checked 2/27/90

Subgoals = socialdevel<h>, esteem<h>, socialskills, immat<m>;

Type= affective<a>;

Problem Situations = teacher led instruction, group work,
away from class, transitions;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<l>;

Problem Scope = one<h>, some<m>, all<m>;

Effort Intrusion = mild<h>, moderate;

Teaching Level =
primary,intermediate, middle school, high school;]

{behatt:

" "

"B23 ATTENDING TO STUDENT FEELINGS",

" "

"Communication and understanding are important to building a relationship",
"through which teachers and students can work together to solve problems.",
"Suggestions for ways to help students cope with their feelings and",
"needs are given.",

" "}

B25 STRATEGIES FOR COOPERATIVE LEARNING

[description: \checked 2/27/90

Subgoals = atten<h>, socialskills<m>, socialdevel<h>, immat<m>;

Type= management<h>, academic modification<h>;

Problem Situations = teacher led instruction<h>, individual work<m>,
group work<h>;

Problem Severity = mild<h>, moderate<m>, severe<l>, extreme<l>;

Problem Scope = one<n>, some<h>, all<h>;

Effort Intrusion = mild<l>, moderate<h>, extensive<m>;

Teaching Level =
primary<h>, intermediate<h>, middle school<h>, high school<m>;

\ EXTRA SPECIFICATIONS

High Low = yes<a>:]

{behatt:

" "

"B25 STRATEGIES FOR COOPERATIVE LEARNING",

" "

"Cooperative learning contrasts with competitive and individualistic",
"tasks by having students share goals and resources. Studies have shown",
"that grouping students of mixed abilities and providing a specific",
"structure can help inattentive or disruptive students be more successful.",
"Two general information articles and three example lesson plans are",
"included to give an overview of this popular and effective technique.",
" "}

B26 LET ELEMENTARY STUDENTS CHOOSE THE REWARD

[description: \checked 2/27/90

Subgoals = discr<h>, atten<h>, workhabits<m>, socialdevel<m>,
aggr<m>, attpunc<m>, immat<l>;

Type = management<a>;

Problem Situations = transitions<m>, away from class<m>,
teacher led instruction<h>, individual work<h>, group work<h>;

Problem Severity = mild<h>, moderate<m>, severe<h>, extreme<l>;

Problem Scope = one<m>, some<m>, all<m>;

Effort Intrusion = mild<n>, moderate<m>, extensive<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<n>, high school<n>:]

{behatt:

" "

"B26 LET ELEMENTARY STUDENTS CHOOSE THE REWARD",

" "

"Students can choose rewards as part of contingency contracting (B15) or",
"as a part of a teacher's overall classroom management plan. Rewards can",
"be easy to arrange such as providing extra free time, or they can be",
"complex, such as providing tangible rewards for certain levels of",
"performance. Gathering student input is crucial to effective use of rewards.",
"Guidelines for and examples of reinforcement surveys are provided.",
" "}

B27 PEER TUTORING

[description: \checked 2/27/90

Subgoals = workhabits<h>, workskills<m>, socialskills<m>, socialdevel<m>;

Type = management<a>, academic modification<h>;

Problem Situations = individual work<h>, away from class<m>;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<l>;

Problem Scope = one<m>, some<m>, all<n>;

Effort Intrusion = mild<n>, extensive<m>, moderate<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<m>, high school<m>;

\ EXTRA SPECIFICATIONS

High Low = yes<a>];

{behatt:

" "

"B27 PEER TUTORING",

" "

"Most behavior interventions are teacher directed. ",

"Another influence on student behavior is the peer group. Peer",

"influence can be utilized for attainment of educational goals through",

"strategies described in this training option, such as peer tutoring,",

"modeling, and reinforcement. ",

" "}

B28 CHANGING DISRUPTIVE BEHAVIOR

[description: \checked 2/27/90

Subgoals = discr<a>, aggr<m>;

Type= management<a>, academic modification;

Problem Situations = teacher led instruction<h>, individual work<h>,
transitions<m>, group work<m>, away from class<m>;

Problem Severity = mild<l>, moderate<h>, severe<m>, extreme<l>;

Problem Scope = one<h>, some<m>, all<l>;

Effort Intrusion = mild<a>;

Teaching Level =

primary<h>, intermediate<h>, middle school<m>, high school<m>];

{behatt:

" "

"B28 CHANGING DISRUPTIVE BEHAVIOR",

" "

"Deciding what is disruptive behavior requires careful observation of the",

"effects of the behavior and teacher needs. Once a",

"decision is made to change a disruptive behavior pattern, some options",

"are available such as differential and intermittent reinforcements",

"attending to academic deficits, restructuring the classroom, and",

"self-control resources.",

" "}

B29 INDIVIDUALIZED PROGRAMMING

[description: \checked 2/27/90

Subgoals = workskills, atten<h>, discr<m>, workhabits<h>;

Type = academic modification<a>;

Problem Situations = individual work<h>;

Problem Severity = mild<h>, moderate<m>, severe<l>, extreme<l>;

Problem Scope = one<m>, some<h>, all<m>;

Effort Intrusion = mild<l>, moderate<h>, extensive <h>;

Teaching Level =

primary<h>, intermediate<h>, middle school<m>, high school<m>;

\ EXTRA SPECIFICATIONS

High Low = yes<a>:]

{behatt:

" "

"B29 INDIVIDUALIZED PROGRAMMING",

" "

"Academic restructuring may help some students improve their class",

"behavior. Individualization is one way to tailor instruction to the",

"student's needs. Some suggestions are given for designing individual",

"work that can make the process efficient and effective.",

" "}

B30 IMPROVING SOCIAL DEFICITS

[description: \checked 2/27/90

Subgoals = socialskills, socialdevel<m>, esteem<m>, immat<m>;

Type= affective<a>, management<h>, academic modification;

Problem Situations = transitions<m>, teacher led instruction<h>, individual work<h>, group work<h>;

Problem Severity = mild<h>, moderate<m>, severe<m>, extreme<l>;

Problem Scope = one<h>, some<h>, all<l>;

Effort Intrusion = mild<m>, moderate<m>, extensive<h>;

Teaching Level =

primary<m>, intermediate<h>, middle school<m>, high school<l>;

\ EXTRA SPECIFICATIONS

General Social Goals = yes<a>;]

{behatt:

" "

"B30 IMPROVING SOCIAL DEFICITS",

" "

"Students with social deficits manifest behavior like withdrawal and age",
"inappropriate behavior. Social deficits can occur as a result of behavior",
"deficiencies, low self-esteem, and avoidance/anxiety patterns. This",
"training option provides several specific strategies for helping",
"students with social deficits such as these.",
" "}

B31 IMPROVING STUDENT MOTIVATION

[description: \checked 2/26/90

Subgoals = workhabits<m>, atten<a>, attpunc<m>;

Type= management, affective, academic modification;

Problem Situations = teacher led instruction<h>, individual work<h>, group work<h>, away from class<l>;

Problem Severity = mild<h>, moderate<m>, severe<m>, extreme<n>;

Problem Scope = one<n>, some<h>, all<h>;

Effort Intrusion = mild<m>, moderate<h>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<m>;

\ EXTRA SPECIFICATIONS

Motivation Needs = yes<a>:]

{behatt:

" "

"B31 IMPROVING STUDENT MOTIVATION",

" "

"Motivation to learn can be described as student attention to lessons",
"and engagement in academic learning tasks in classrooms. Strategies",
"to help increase student motivation are presented in two categories:",
"1. strategies to establish motivation to learn and",
"2. strategies that capitalize on existing intrinsic motivation in order",
"to make the academic tasks more enjoyable for students.",

" "}

B32 PRACTICING POSITIVE REINFORCEMENT

[description: \checked 3/1/90

Subgoals = workhabits<h>, attpunc<h>, discr<h>, atten<h>;

Type= management<a>;

Problem Situations =

away from class<m>, teacher led instruction<h>, individual work<h>,
group work<h>, transitions<m>;

Problem Severity = mild<m>, moderate<h>;

Problem Scope = one<h>, some<h>, all<h>;

Effort Intrusion = mild<n>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<h>:]

{behatt:

" "

"B32 PRACTICING POSITIVE REINFORCEMENT",

" "

"Effective classroom discipline is aided by positive reinforcement.",
"Ten practical and specific principles for positive behavior management",
"are explained and techniques for their application to classrooms are",
"given.",

" "}

B33 COMMUNICATION STRATEGIES

[description: \checked 2/26/90

Subgoals = aggr<m>, discr<h>, socialdevel<m>;

Type = affective<h>;

Problem Situations =
away from class<m>, transitions<h>, individual work<h>, group work<m>,
teacher led instruction<h>;

Problem Severity = mild<h>, moderate<m>, severe<l>, extreme<n>;

Problem Scope = one<h>, some<h>, all<h>;

Effort Intrusion = mild<h>, moderate<m>;

Teaching Level =
primary<m>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Teacher Problems = none<n>:]

{behatt:

""

"B33 COMMUNICATION STRATEGIES",
"Communication consists of talking and listening. Specific suggestions",
"for active listening and using I-messages in talking with students",
"may help mutual communication in a seven-stage process of problem",
"solving as well as in non-conflict situations.",

""}

B34 INCREASING ATTENTIVENESS DECREASING WITHDRAWAL

[description: \checked 2/26/90

Subgoals = atten<a>, workhabits<h>, socialdevel<m>;

Type = management<a>, academic modification<h>;

Problem Situations = teacher led instruction<h>, individual work<m>,
group work<m>;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<n>;

Problem Scope = one<h>, some<m>, all<l>;

Effort Intrusion = mild<h>, moderate<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<m>, high school<m>;

EXTRA SPECIFICATIONS

Classroom Management Needs = yes<a>:]

{behatt:

" "

" B 34 INCREASING ATTENTIVENESS, DECREASING WITHDRAWAL",

" "

"Students act inattentive and withdrawn for physical, situational,"
"and emotional reasons. Strategies for encouraging such students",
"include: relating assignments to the student's interests, giving short,"
"clear instructions, responding to and rewarding attending behaviors,"
"and involving the student in the task by self-recording activities",
"and attending behaviors.",

" "],

B35 MEETING THE NEEDS OF THE DISRUPTIVE STUDENT

[description: \checked 2/26/90

Subgoals = discr<a>, atten<h>, workhabits<m>, aggr<l>, socialdevel<l>, immat;

Type = management<a>;

Problem Situations = teacher led instruction<h>, individual work<h>,
group work<h>;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<n>;

Problem Scope = one<m>, some<m>, all<m>;

Effort Intrusion = mild<h>, moderate<h>;

Teaching Level =

primary<h>, intermediate<h>, middle school<m>, high school<m>:]

{behatt:

" "

" B 35 MEETING THE NEEDS OF THE DISRUPTIVE STUDENT",

" "

"Some strategies that have proven effective with restless students include:",
"1) legitimizing energy release, 2) clarifying and articulating teacher",
"expectations, 3) signaling the student in several ways,"
"4) selective use of attention, 5) reprimanding, 6) using physical",
"placement in the classroom, 7) capitalizing on social motivation by",
"involving the student in group activities, 8) using student",
"self-monitoring techniques, and 9) contracting. Steps are outlined",
"for each of these strategies.",
" "],

B36 SOCIAL SKILLS STRATEGIES

[description: \checked 2/26/90

Subgoals = socialskills<h>, socialdevel;

Type= management<a>;

Problem Situations =

teacher led instruction<m>, individual work<m>, group work<m>,
away from class<m>, transitions<m>;

Problem Severity = mild<m>, moderate<m>, severe<l>, extreme<l>;

Problem Scope =
one<h>;

Effort Intrusion = mild<n>, moderate<m>, extensive<h>;

Teaching Level =

primary<h>, intermediate<h>,middle school<h>, high school<l>;

\ EXTRA SPECIFICATIONS

Withdrawn Social Needs = yes<a>:]

{behatt:

" "

" B 36 SOCIAL SKILLS STRATEGIES",

" "

"Intervention to increase the social skills of children",

"can create behavior change. Successful strategies include: 1) teacher",

"prompting and reinforcement, 2) peer imitation training, 3) peer",

"prompting and reinforcement, 4) peer coaching in social skills,",

"5) cooperative academic tasks, and 6) self-management approaches.",

" "],

B37 SELF CONTROL TRAINING

[description: \checked 2/26/90

Subgoals = discr<h>, workhabits<m>, aggr<m>;

Type = management<a>;

Problem Situations = teacher led instruction<m>, individual work <h>,
away from class<m>, transitions<m>;

Problem Severity = mild<m>, moderate<h>, severe<n>, extreme<n>;

Problem Scope = one<h>, some<n>, all<n>;

Effort Intrusion = mild<n>, moderate<n>, extensive<m>;

Teaching Level =
primary<m>, intermediate<h>, middle school<h>, high school<h>:]

{behatt:

" "

"B37 SELF-CONTROL TRAINING",

" "

"Training students in self-instruction and cognitive self-control have",
"been found to have an effect on preventing and managing behavior problems.",
"Checklists of skills and examples of training are provided.",

" "}

B38 SCHOOL HOME MOTIVATION

[description: \checked 2/26/90

Subgoals = workhabits<m>, discr<h>, attpunc<m>, aggr<m>, esteem<h>, immat;

Type = management<a>, affective<m>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<m>,
away from class<h>, transitions<m>;

Problem Severity = mild<m>, moderate<h>, severe<h>, extreme<n>;

Problem Scope = one<h>, some<m>, all<h>;

Effort Intrusion = mild<m>, moderate<m>, extensive<h>;

Teaching Level =
primary<h>, intermediate<h>, middle school<m>, high school<l>:]

{behatt:

" "

"B38 SCHOOL-HOME MOTIVATION",

" "

"Combining efforts of school and home to reinforce appropriate behavior",
"of students can be very effective. The experimental procedure in this",
"study involved sending a letter home for good behavior and parents",
"providing reinforcement accordingly. Within one day the disruptive",
"behavior of 23 third graders went from constituting 90 percent of the",
"observed time to 10 percent of the observed time. Principles from the",
"study can be applied to most classroom situations.",

" "}

B39 ORGANIZING PLAYTIMES FOR PRIMARY STUDENTS

[description: \checked 2/26/90

Subgoals = discr<h>, aggr<h>, socialdevel<m>, immat<h>;

Type = management<a>;

Problem Situations = teacher led instruction<n>, away from class<a>;

Problem Severity = mild<m>, moderate<h>, severe<m>, extreme<n>;

Problem Scope = one<h>, some<m>;

Effort Intrusion = mild<h>;

Teaching Level =

primary<h>, intermediate<m>, middle school<n>, high school<n>]

{behatt:

" "

"B39 ORGANIZING PLAYTIMES FOR PRIMARY STUDENTS",

" "

"Outdoor play, free play, trips and other events can be difficult",

"for students who have behavior problems. But these times",

"can provide valuable opportunities for social skill, cognitive",

"skill, and motor skill development. Nine suggestions are included",

"for organizing activities to maximize success.",

" "}

B40 SKILLSTREAMING FOR ADOLESCENTS

[description: \checked 2/26/90

Subgoals = socialdevel<h>, socialskills<h>;

Type = management<a>;

Problem Situations =

teacher led instruction<m>, individual work<m>, group work<h>,

transitions<h>, away from class<h>;

Problem Severity = mild<n>, moderate<m>, severe<h>, extreme<l>;

Problem Scope = one<n>, some<h>, all<m>;

Effort Intrusion = mild<n>, moderate<m>, extensive<h>;

Teaching Level =

primary <n>, intermediate<l>, middle school <h>, high school<h>;

\ EXTRA SPECIFICATIONS

General Social Goals = yes<a>:]

{behatt:

" "

"B40 SKILLSTREAMING FOR ADOLESCENTS",

" "

"Skillstreaming is a social skills curriculum and teaching method that",
"relies on using a group approach with modeling and role playing of",
"social skills. A detailed explanation of techniques and lists of",
"skills are provided.",
"},"

B41 RESPONSE COST

[description: \checked 2/26/90

Subgoals = discr<h>, aggr<m>, attpunc<h>, atten<m>, esteem<n>;

Type = management<a>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<m>,
transitions<h>, away from class<m>;

Problem Severity = mild<n>, moderate<m>, severe<m>, extreme<h>;

Problem Scope = one<m>, some<m>, all<m>;

Punitive = yes<a>;

Effort Intrusion = mild<n>, moderate<m>, extensive<h>;

Teaching Level =
primary<l>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS:

Immature And Emotional Problems = suicide talk<n>, emotional<n>,
negative talk<n>, apathy<l>, self injury<n>, ashamed<l>:]

{behatt:

" "

"B41 RESPONSE COST",

" "

"Response cost is a technique designed to reduce misbehavior through removal",
"of reinforcers. It is often used in conjunction with token systems",
"or contingency contracts. Guidelines and cautions for the use of ",
"response cost are provided.",
"},"

B42 LET SECONDARY STUDENTS CHOOSE THE REWARD

[description: \checked 2/26/90

Subgoals = discr<h>, aggr<m>, workhabits<m>, atten<m>, attpunc<h>;

Type = management<a>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<h>,
transitions<m>, away from class<m>;

Problem Severity = mild<m>, moderate<m>, severe<m>, extreme<m>;

Problem Scope = one, some, all;

Effort Intrusion = mild<n>, moderate<m>, extensive<h>;

Teaching Level =
primary<n>, intermediate<n>, middle school<h>, high school<h>;]

{behatt:

" "

"B42 LET SECONDARY STUDENTS CHOOSE THE REWARD",

" "

"Students can choose rewards as part of contingency contracting (B15)",
"or as a part of a teacher's overall classroom management plan. Rewards",
"can be easy to arrange, such as providing extra free time, or they can be ",
"complex, such as providing tangible rewards for certain levels of",
"performance. Gathering student input is crucial to effective use of",
"rewards. Guidelines for and examples of reinforcement surveys are provided.",
" "},

B43 TEACHING SOCIAL COMMUNICATION SKILLS

[description: \checked 2/26/90

Subgoals = socialskills<h>, socialdevel<m>;

Type = management<a>;

Problem Situations =
teacher led instruction<h>, individual work<h>, group work<m>,
transitions<h>, away from class<h>;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<l>;

Problem Scope = one<m>, some<m>, all<l>;

Effort Intrusion = mild<l>, moderate<m>, extensive<m>;

Teaching Level =
primary<h>, intermediate<h>, middle school<n>, high school<n>;

\ EXTRA SPECIFICATIONS

General Social Goals = yes<a>:]

{behatt:

" "

"B43 TEACHING SOCIAL COMMUNICATION SKILLS",

" "

"Social communication is a class of behaviors such as greeting, participating",
"in a group, following rules, that is important in relating to peers and",
"teachers. This use of language to achieve social goals is outlined in steps",
"of a skills training model.",
" "],

B44 LEARNING STATIONS

[description: \checked 2/26/90

Subgoals = disr<m>, workhabits<h>, atten<h>;

Type = academic modification<a>, management<a>;

Problem Situations = individual work<h>, group work<m>,
teacher led instruction<n>, away from class<n>, transitions<n>;

Problem Severity = mild<h>, moderate<m>, severe<n>;

Problem Scope = one<n>, some<m>, all<h>;

Effort Intrusion = mild<n>, moderate<m>;

Teaching Level =
primary<m>, intermediate<h>, middle school<m>, high school<l>;

\ EXTRA SPECIFICATIONS

Independent Work Needs = yes<a>;

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B44 LEARNING STATIONS",

" "

"Learning stations can be set up in classrooms to provide a way to",
"individualize instruction and to meet specific educational objectives.",
"Used mostly in elementary classrooms, learning centers may serve ",
"similar goals in secondary settings.",
" "],

B45 GRADING

[description: \checked 2/23/90

Subgoals = atten<h>, workhabits<h>, attpunc, esteem;

Type = academic modification<a>;

Problem Situations = teacher led instruction<h>, individual work<h>, group work<m>, away from class, transitions;

Problem Severity = mild<m>, moderate<h>, severe<l>, extreme<n>;

Problem Scope = one<h>, some<h>, all<l>;

Effort Intrusion = mild<l>, moderate<m>, extensive<l>;

Teaching Level = primary<m>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Needs = work<a>:]

{behatt:

" "

"B45 GRADING",

" "

"In addition to their evaluative function, grades can be a useful motivator",
"for students. Combining letter grades or scores with descriptive",
"performance feedback, and modifying grading systems are options that",
"teachers may want to consider.",
" "},

B46 MANAGING THE ASSIGNMENT

[description: \checked 2/23/90

Subgoals = workskills, atten<h>, workhabits<h>, discr<m>;

Type = academic modification<a>;

Problem Situations = individual work<h>, group work<m>, away from class<m>;

Problem Severity = mild<h>, moderate<h>, severe<m>, extreme<l>;

Problem Scope = one<m>, all<h>, some<m>;

Effort Intrusion = mild<h>, moderate<m>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Needs = work<a>;

Independent Work Needs = yes<a>;

Classroom Management Needs = yes<a>;]

{behatt:

" "

"B46 MANAGING THE ASSIGNMENT",

" "

"When students display poor organization skills, teachers sometimes need to",

"look at factors related to the assignments themselves as well as to",

"students' behavior. Inappropriate behavior may be symptomatic of a poor",

"fit with the assignment. This teaching activity gives teachers guidelines",

"for looking at assignment directions, difficulty level, and adapting",

"assignments and materials.",

" "],

B47 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS

[description: \checked 2/23/90

Subgoals = atten<l>, discr<l>, workskills, workhabits<h>;

Type = management<a>;

Problem Situations = teacher led instruction<h>, individual work<h>, group work<m>, away from class<m>;

Problem Severity = mild<h>, moderate<h>, severe<l>, extreme<n>;

Problem Scope = one<n>, some<m>, all<h>;

Effort Intrusion = mild<h>, moderate<m>;

Teaching Level =

primary<h>, intermediate<h>, middle school<h>, high school<m>;

\ EXTRA SPECIFICATIONS

Needs = work<a>;

Independent Work Needs = yes<a>;]

{behatt:

" "

"B47 ACCOMMODATIONS FOR STUDENTS WITH ORGANIZATIONAL PROBLEMS",

" "

"Often accommodations are necessary to enable students to perform to the",

"best of their abilities, and often poor organizational behavior is at the",
"core of their problem. This teaching activity lists accommodations",
"teachers have found to be effective with students.",
" "},

B48 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING

[description: \checked 2/23/90

Subgoals = atten<h>, discr<h>;

Type = academic modification<h>;

Problem Situations = teacher led instruction<a>, individual work<m>,
group work<m>, away from class<n>;

Problem Severity = mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope = one<n>, some<l>, all<h>;

Effort Intrusion = mild<h>, moderate<m>;

Teaching Level =
primary<h>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Needs = distracted<a>:]

{behatt:

" "

"B48 TEACHER BEHAVIORS THAT ENABLE STUDENT THINKING",

" "

"A student engaged in a lesson is less likely to be disruptive and more",
"likely to profit from the teaching. Four categories of teacher behavior",
"that have been demonstrated to influence student achievement and involvement",
"by inviting, maintaining, and enhancing students' thinking are described.",
" "},

B49 THINK PAIR SHARE

[description: \checked 2/23/90

Subgoals = atten<h>, discr;

Type = academic modification<h>;

Problem Situations = teacher led instruction<a>, away from class<n>;

Problem Severity = mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope = one<n>, some<l>, all<h>;

Effort Intrusion = mild<h>, moderate<m>;

Teaching Level =

primary<m>, intermediate<h>, middle school<h>, high school<h>;

\ EXTRA SPECIFICATIONS

Needs = fights<n>;

Classroom Management Needs = yes<a>:]

{behatt:

" "

"B49 THINK PAIR SHARE",

" "

"Think-Pair-Share is a strategy developed to encourage student participation",
"in the classroom. Students are taught to use a new response cycle in",
"answering questions. The technique is simple to learn and is applicable",
"across all grade levels, disciplines, and group sizes.",
" "],

B50 SOCIAL SKILLS CURRICULUM ANALYSIS

[description: \checked 2/23/90

Subgoals = socialskills<h>, socialdevel<m>;

Type = management<a>;

Problem Situations =

teacher led instruction<h>, individual work<m>, group work<h>, transitions<l>;

Problem Severity = mild<h>, moderate<h>, severe<l>, extreme<n>;

Problem Scope = one<n>, some<m>, all<m>;

Effort Intrusion = mild<n>, moderate<h>, extensive<m>;

Teaching Level =

primary<h>, intermediate<h>, middle school<l>, high school<n>;

\ EXTRA SPECIFICATIONS

General Social Goals = yes<a>;

Group Process = yes<a>:]

{behatt:

" "

"B50 SOCIAL SKILLS CURRICULUM ANALYSIS",

" "
 "There are many social skills curriculum packages available. When",
 "selecting what curriculum to use, one should consider the aspects of",
 "assessment, what strategies to implement, and measurement of effects",
 "on student performance. Practical considerations, instructional strategies,",
 "and a list of social skills programs are presented.",
 " "},

B51 PROBLEM SOLVING

[description: \checked 2/23/90

Subgoals = workhabits<h>, workskills, socialdevel<h>, socialskills;

Type = management<a>;

Problem Situations = individual work, group work<h>, away from class<h>;

Problem Severity = mild<h>, moderate<m>, severe<l>, extreme<n>;

Problem Scope = one<l>, some<m>, all<h>;

Effort Intrusion = mild<n>, moderate<m>;

Teaching Level =
 primary<n>, intermediate<h>, middle school<h>, high school<l>;

\ EXTRA SPECIFICATIONS

Needs = work<a>;
 Independent Work Needs = yes<a>:]

{behatt:

" "
 "B51 PROBLEM SOLVING",

" "
 "'Solutions Unlimited' is a multimedia (computer, video, worksheet) program",
 "in which several problem-solving strategies are presented. Each unit consists",
 "of a video lesson and computer application. Emphasis is on breaking",
 "strategies into steps that are easy to remember and using the steps in.",
 "practical applications. Eight units are described and reviewed. Available",
 "at Howard County Diagnostic Center and Howard County Staff Development Center.",
 " "},

B53 FIVE TEACHING STRATEGIES FOR SOCIAL EFFECTIVENESS TRAINING

[description: \checked 2/23/90

Subgoals = socialskills<h>, socialdevel<h>, aggr<l>;

Type = management<a>;

Problem Situations = teacher led instruction<h>, individual work,
transitions, group work<h>, away from class<h>;

Problem Severity = mild<h>, moderate<h>, severe<l>, extreme<n>;

Problem Scope = one<m>, some<m>, all<h>;

Effort Intrusion = mild<n>, moderate;

Teaching Level =
primary<h>, intermediate<h>, middle school <l>, high school<n>;

\ EXTRA SPECIFICATIONS

General Social Goals = yes<a>:]

{behatt:

" "

"B53 FIVE TEACHING STRATEGIES FOR SOCIAL EFFECTIVENESS TRAINING",

" "

"Five teaching strategies are described as important to a positive classroom",

"atmosphere in which appropriate student behavior is elicited or strengthened.",

"Use of the five strategies: positive feedback, ignore-attend-praise, ",

"teaching interaction, direct prompt, and sit and watch, may make teaching",

"social skills and other subjects easier and more rewarding.",

" "],

B54 THINK ALOUD

[description: \checked 2/23/90

Subgoals = workhabits<h>, workskills, socialdevel<h>, socialskills;

Type = management<a>;

Problem Situations = individual work, group work<h>, away from class;

Problem Severity =
mild<h>, moderate<m>, severe<n>, extreme<n>;

Problem Scope = one<n>, some<m>, all<m>;

Effort Intrusion = mild<n>, moderate<m>, extensive <h>;

Teaching Level =
primary<h>, intermediate<m>, middle school<n>, high school<n>;

\ EXTRA SPECIFICATIONS

Needs = work<a>;
Independent Work Needs = yes<a>:]

{behatt:

" "

"B54 THINK ALOUD",

" "

" Verbal mediation (thinking aloud to guide problem solving) has proven to",
"be an effective strategy for solving academic and social problems. `Think",
"Aloud' program for improving social and cognitive skills includes methods",
"for teachers that facilitate student use of verbal mediation.",

""}

).

%
externals:

File Clear: \Program to clear files used to combine goals & types
[program: "FC"].

%

demons:

\DEMONS TO SELECT GET HELP

Get Help Demon1:

when

Needs = fights or
Teacher Problems = aggressive or
Problem Severity = extreme and
Get Help Stop = no

then

reassert Get Help Stop = yes.
erase Get Help Followup.
if Get Help Followup = yes then
message Get Help Message.
endif.
endwhen.

Get Help Demon2:

when

Immature And Emotional Problems = suicide talk | self injury and
Get Help Stop = no

then

reassert Get Help Stop = yes.
reassert Get Help Followup = yes.
message Get Help Message.

endwhen.

*** DEMONS TO ASK FOLLOW-UP QUESTIONS IN ADVISOR

Work Ask Demon:

```
when
  Needs = work
then
  erase Work Problems.
  askfor Work Problems.
  if Work Problems = seelist then
    message
```

```
"The following work-related behaviors may be required",
"in a school situation:", "", Single Line, "",
" * Completing tasks of a given size and complexity.",
" * Working independently for a set period of time",
" * Attending to the teacher during a lecture.",
" * Taking notes.",
" * Moving around the classroom to obtain materials, complete",
" assignments, form teaching groups, etc.",
" * Working with other students on cooperative tasks.",
" * Studying and doing assignments at home.", "", Single Line, "".
```

```
erase Work Problems.
askfor Work Problems.
endif.
endwhen.
```

Social Ask Demon:

```
when
  Needs = social | fights or
  Immature And Emotional Problems = social
  and Social Ask Stop = no
then
  reassert Social Ask Stop = yes.
  erase Social Problems, Teacher Problems.
  askfor Social Problems, Teacher Problems.
endwhen.
```

Immature And Emotional Ask Demon:

```
when
  Needs = immature emotional or
  Social Problems = fear | emotional
  and Immature And Emotional Ask Stop = no
then
  reassert Immature And Emotional Ask Stop = yes.
  erase Immature And Emotional Problems.
  askfor Immature And Emotional Problems.
endwhen.
```

\\DEMON TO DISPLAY GOALS

Display Goals Demon:

when

Display Goals = yes

then

message

LCS,

" ===== CURRENT GOALS =====",

" HIGHEST PRIORITY GOALS: ",

if Atten = high then message Atten Statement. endif.

if Workhabits = high then message Workhabits Statement. endif.

if Workskills = high then message Workskills Statement. endif.

if Attpunc = high then message Attpunc Statement. endif.

if Socialskills = high then message Socialskills Statement. endif.

if Socialdevel = high then message Socialdevel Statement. endif.

if Esteem = high then message Esteem Statement. endif.

if Immature = high then message Immature Statement. endif.

if Disr = high then message Disr Statement. endif.

if Aggr = high then message Aggr Statement. endif.

if Atten # high and Workhabits # high and Workskills # high and

Attpunc # high and Socialskills # high and Socialdevel # high and

Immature # high and Esteem # high and Disr # high and Aggr # high

then message None Statement. endif.

message

" MEDIUM PRIORITY GOALS: ",

if Atten = medium then message Atten Statement. endif.

if Workhabits = medium then message Workhabits Statement. endif.

if Workskills = medium then message Workskills Statement. endif.

if Attpunc = medium then message Attpunc Statement. endif.

if Socialskills = medium then message Socialskills Statement. endif.

if Socialdevel = medium then message Socialdevel Statement. endif.

if Esteem = medium then message Esteem Statement. endif.

if Immature = medium then message Immature Statement. endif.

if Disr = medium then message Disr Statement. endif.

if Aggr = medium then message Aggr Statement. endif.

if Atten # medium and Workhabits # medium and

Workskills # medium and Attpunc # medium and Socialskills # medium

and Socialdevel # medium and Immature # medium and Esteem # medium

and Disr # medium and Aggr # medium

then message None Statement. endif.

message

Double Line,

" GOALS NOT SELECTED FOR YOU AT THIS TIME: ",

if Atten = no then message Atten Statement. endif.

if Workhabits = no then message Workhabits Statement. endif.

if Workskills = no then message Workskills Statement. endif.

if Attpunc = no then message Attpunc Statement. endif.

if Socialskills = no then message Socialskills Statement. endif.

if Socialdevel = no then message Socialdevel Statement. endif.

if Esteem = no then message Esteem Statement. endif.

if Immature = no then message Immature Statement. endif.

```

if Disr = no then message Disr Statement. endif.
if Aggr = no then message Aggr Statement. endif.
if Atten # no and Workhabits # no and
  Workskills # no and Attpunc # no and Socialskills # no
  and Sociallevel # no and Immature # no and Esteem # no
  and Disr # no and Aggr # no
then message None Statement. endif.
endwhen.

```

\DEMON TO REDISPLAY TRAINING OPTIONS

```

Redisplay Demon:
when
  Seeagain = yes
then
  message LCS,
  "You can obtain a printout of whatever is on the screen by simply",
  "pressing the Print Screen key.",
  ""
  "Please note that this only works if a printer is attached, turned",
  "on and ready to print.",
  ""
  "If you press the Print Screen key and nothing happens, check that",
  "the printer is turned on and has paper.",
  ""
  display value of Behavior Training Options.
  if Want = yes then
    display attach behatt of value of Behavior Training Options.
  endif.
  erase Want.
  erase Seeagain.
  askfor Seeagain.
endwhen.

```

%

actions:

\CLEARS TEMPORARY GOAL FILES

```

filenumber = 1.

```

\INITIALIZING VARIABLES

\EXECUTION CONTROL

```

Immature And Emotional Ask Stop = no.
Social Ask Stop = no.
Get Help Stop = no.
Confirm Goals = "z".

```

\NEEDS SPECIFICATIONS

Work Problems = unknown.
Social Problems = none.
Teacher Problems = none.
Immature And Emotional Problems = none.

\GOALS

Atten = no.
Workhabits = no.
Workskills = no.
Attpunc = no.
Socialskills = no.
Socialdevel = no.
Esteem = no.
Immature = no.
Disr = no.
Aggr = no.

\APPROACHES

\Get Help = no.
Get Help Followup = no.

\TRANSITIONAL GOAL AND APPROACHES VARIABLES

At = ""
Att = ""
Wh = ""
Wht = ""
Ws = ""
Wst = ""
Ap = ""
Apt = ""
Ss = ""
Sst = ""
Sd = ""
Sdt = ""
Im = ""
Imt = ""
Es = ""
Est = ""
Di = ""
Dit = ""
Ag = ""
Man = ""
Mant = ""
Ct = ""
Ctt = ""
Bm = ""

Bmt = ""
Af = ""

\EXECUTION OF CONSULTATION

display attach Cover of kb.
message combine ("Last update: ", Update).
display attach Credit of kb.

message
LCS,
Double Line,""
" The Behavior Strategy Selector contains a number of methods",
" for dealing with problems of student behavior and motivation.",
""
" It is designed to solve specific problems involving one student",
" a group of students or an entire class.",
""
" You will be asked a series of questions to help the computer",
" select the most appropriate teaching methods. Then, you will",
" receive a list of suggested teaching methods.",
""
" Information on each of these methods is contained in the ",
" blue binders or boxes.",
""
" You will be allowed to repeat the program if you want.",
""
" Now, please think of a problem involving the behavior and/or ",
" motivation and/or emotions of one or more students, and",
" proceed with the program.",
""
Double Line.

\ASK FOR INPUT ATTRIBUTES

askfor Teaching Level, Needs, Problem Scope, Problem Situations,
Problem Severity, Prior Efforts, Peer Influence.

if Needs = distracted | disturbs | work then
askfor Work Type.
askfor High Low.
else
Work Type = no.
High Low = no.
endif.

\ CALCULATE GOAL SCORES AND RECONCILE GOALS

Disruption Aggression Score =
istruer(Needs = disturbs) + 2*istruer (Needs = fights) +
istruer (Needs = tardy truant) + istruer (Teacher Problems = resistant) +
2*istruer (Teacher Problems = aggressive). \MAX = 7

Work Score =

istru (Needs = distracted) + istru (Needs = work). \MAX = 2

Social Score =

istru (Social Problems = never) + istru (Social Problems = sometimes) +
istru (Social Problems = fear) + istru (Social Problems = inappropriate) +
istru (Social Problems = perceptions) +
istru (Social Problems = emotional) +
istru (Teacher Problems = avoidance). \MAX = 7

Immature Emotional Score =

\ istru (Immature And Emotional Problems=immature)
istru (Immature And Emotional Problems=helpless)
+ istru (Immature And Emotional Problems=bizarre)
+ 3*istru (Immature And Emotional Problems=suicide talk)
+ istru (Immature And Emotional Problems=emotional)
+ istru (Immature And Emotional Problems=poor self care)
+ istru (Immature And Emotional Problems=apathy)
+ 3*istru (Immature And Emotional Problems=self injury)
+ istru (Immature And Emotional Problems=social)
+ istru (Social Problems = emotional). \MAX = 11

Esteem Score =

3*istru (Immature And Emotional Problems=suicide talk)
+ istru (Immature And Emotional Problems=negative talk)
+ istru (Immature And Emotional Problems=poor self care)
+ istru (Immature And Emotional Problems=ashamed)
+ 3*istru (Immature And Emotional Problems=self injury). \MAX = 7

Affective Score =

Immature Emotional Score + Esteem Score
- istru (Immature And Emotional Problems = suicide talk)
- istru (Immature And Emotional Problems = poor self care)
- istru (Immature And Emotional Problems = self injury). \MAX = 15

\PATTERNS

\ PATTERN 1: Aggression/Disruption without Emotional Factors
if Disruption Aggression Score ge 2 and Affective Score le 2 then

if Needs = disturbs or Teacher Problems = resistant then
reassert Disr = high. endif.
if Needs = fights or Teacher Problems = aggressive then
reassert Aggr = high. endif.
if Needs = tardy truant then
if Disruption Aggression Score = 2 then
reassert Attpunc = high.
else reassert Attpunc = medium. endif. endif.
if Social Score gt 2 and Disruption Aggression Score lt 4 then
if Social Problems = never | perceptions | inappropriate then
reassert Socialskills = medium.
else reassert Socialdevel = medium. endif. endif.


```

if Social Score gt 4 and Disruption Aggression Score lt 4 then
  if Social Problems = never | perceptions | inappropriate then
    reassert Socialskills = high.
  else reassert Socialdevel = high. endif. endif.
if Needs = distracted then
  reassert Atten = high. endif.

endif. \Disruption Aggression Score ge 2 and Aff Sc le 2

\ PATTERN 2: Aggression/Disruption with Emotional Factors

if Disruption Aggression Score ge 2 and Affective Score gt 2 then

  if Needs = disturbs or Teacher Problems = resistant then
    reassert Disr = high. endif.
  if Needs = fights or Teacher Problems = aggressive then
    reassert Aggr = high. endif.
  if Immature Emotional Score ge 1 then
    reassert Immature = medium. endif.
  if Immature Emotional Score ge 2 or Disruption Aggression Score = 2 then
    reassert Immature = high. endif.
  if Esteem Score ge 1 then
    reassert Esteem = high. endif.
  if Social Score gt 2 and Disruption Aggression Score lt 4 then
    if Social Problems = never | perceptions | inappropriate then
      reassert Socialskills = medium.
    else reassert Socialdevel = medium. endif. endif.
  if Social Score gt 4 and Disruption Aggression Score lt 4 then
    if Social Problems = never | perceptions | inappropriate then
      reassert Socialskills = high.
    else reassert Socialdevel = high. endif. endif.

  erase Goal Count.
  if Needs = distracted and Goal Count lt 5 then
    if Goal Count = 4 then reassert Atten = medium.
    else reassert Atten = high. endif. endif.
  erase Goal Count.
  if Needs = tardy truant and Goal Count lt 5 then
    if Disruption Aggression Score = 2 then
      reassert Attpunc = high.
    else reassert Attpunc = medium. endif. endif.

endif. \Disruption Aggression Score ge 2 and Aff Sc gt 2

\ PATTERN 3: Emotional Factor without Aggression/Disruption Factor

if Disruption Aggression Score lt 2 and Affective Score gt 2 then

  if Immature Emotional Score ge 1 then
    reassert Immature = high. endif.
  if Esteem Score ge 1 then
    reassert Esteem = high. endif.

```

```

if Social Score ge 1 then
  if Social Problems = never | perceptions | inappropriate then
    reassert Socialskills = medium.
  else reassert Sociallevel = medium. endif. endif.
if Social Score ge 3 then
  if Social Problems = never | perceptions | inappropriate then
    reassert Socialskills = high.
  else reassert Sociallevel = high. endif. endif.
if Needs = distracted then
  if Affective Score gt 6 then reassert Atten = medium.
  else reassert Atten = high. endif. endif.
if Needs = work then
  if Work Problems = sometimes | both then
    erase Goal Count.
    if Goal Count = 4 then reassert Workhabits = medium.
    else reassert Workhabits = high. endif. endif.
  erase Goal Count.
  if Work Problems = never | both and Goal Count lt 5 then
    if Goal Count = 4 then reassert Workskills = medium.
    else reassert Workskills = high. endif. endif.
endif.
erase Goal Count.
if Goal Count lt 5 and Needs = disturbs or
  Teacher Problems = resistant then
  reassert Disr = high. endif.
erase Goal Count.
if Needs = tardy truant and Goal Count lt 5 then
  if Goal Count = 4 then
    reassert Attpunc = medium.
  else reassert Attpunc = high. endif. endif.

```

endif. \Disruption Aggression Score lt 2 and Affective Score gt 2

\ PATTERN 4: No Big Aggression or Disruption Factors

if Disruption Aggression Score lt 2 and Affective Score le 2 then

```

if Needs = disturbs or Teacher Problems = resistant then
  reassert Disr = high. endif.
if Needs = tardy truant then
  reassert Attpunc = high. endif.
if Needs = distracted then
  if Disruption Aggression Score gt 0 then
    reassert Atten = medium.
  else reassert Atten = high. endif. endif.
if Needs = work then
  if Work Problems = sometimes | both then
    if Disruption Aggression Score gt 0 then
      reassert Workhabits = medium.
    else reassert Workhabits = high. endif. endif.
  if Work Problems = never | both then
    if Disruption Aggression Score gt 0 then

```

```

    reassert Workskills = medium.
    else reassert Workskills = high. endif. endif.
    erase Goal Count.
    if Goal Count = 5 then reassert Workskills = no. endif.
    endif.
    if Esteem Score gt 0 then
        reassert Esteem = high. endif.
    erase Goal Count.
    if Goal Count lt 5 then
        if Social Score gt 0 then
            if Social Problems = never | perceptions | inappropriate then
                reassert Socialskills = medium.
            else reassert Sociallevel = medium. endif. endif.
        if Social Score ge 3 then
            if Social Problems = never | perceptions | inappropriate then
                reassert Socialskills = high.
            else reassert Sociallevel = high. endif. endif.
        endif.
    endif. \Dis Agg lt 2 and Aff Score le 2

```

\REPORT GOALS

message

LCS,

```

"    Based on your answers to the preceding questions,"
"    the computer recommends that you prioritize your",
"    problem solving goals as shown on the next screen.",
""

```

```

"    Please review the goals. The computer will use",
"    them in selecting specific techniques to solve the",
"    problem you have described.",
""

```

```

"    YOU MAY SEE EXPLANATIONS OF THE GOALS AND REVISE",
"    THEIR PRIORITIES.",
""

```

```

"    OR YOU MAY SIMPLY PROCEED WITH THE PROGRAM USING",
"    THE GOALS AS SUGGESTED",
""

```

```

"    ** PLEASE NOTE THAT YOU MAY ONLY CHOOSE A TOTAL OF",
"    FIVE HIGH AND MEDIUM PRIORITY GOALS. ** "

```

Display Goals = yes. \This activates Goal Display Demon.

\CYCLES THROUGH DISPLAY AND CONFIRM

Proceed OK = no.

while Proceed OK = no do

erase Confirm Goals.

while Confirm Goals # "p" and Confirm Goals # "P" do

if Confirm Goals = "x" or Confirm Goals = "X" then


```

3*istru (Work Type = yes)
+ 3*istru (High Low = yes)
+ 2*istru (Work Problems = sometimes | both)
+ 3*istru (Needs = work and Needs # disturbs and Needs # fights
and Needs # tardy truant)
- istru (Work Problems = never)
- istru (Problem Situations = away from class)
- istru (Problem Situations = transitions)
- istru (Problem Scope = one)
+ istru (Needs = distracted)/2
- istru (Needs = fights)/2
- istru (Needs = social)/2
- istru (Needs = immature emotional)/2.

```

```

if
  Atten # no or
  Workskills # no or
  Workhabits # no or
  Disr # no
  and Change Tasks Score ge 2
then
  Change Tasks = yes.
else
  Change Tasks = no.
endif.

```

```

\ Affective NOTE--
\ Affective Score = Esteem Score + Immature Emotional Score - duplication.

```

```

if
  Socialdevel # no or
  Immature # no or
  Esteem # no
  and Affective Score gt 0
then
  Affective = yes.
else
  Affective = no.
endif.

```

```

\ RECONCILE APPROACHES--SET DEFAULT TO GENERAL CLASSROOM MANAGEMENT AND
\ LIMIT APPROACH COMBINATIONS

```

```

if Approach Count = 0
then
  reassert Management = yes.
  erase Approach Count.
endif.

```

```

\WRITE GOALS TO FILE AND RECOVER AS COMBINED ATTRIBUTE

```

```

\PREPARE GOALS FOR WRITE AND RECOVER

```



```

if Atten # no then
  if Atten = medium then reassert At = "atten<m> ". endif.
  if Atten = high then reassert At = "atten<h> ". endif.
  if Workhabits # no or Workskills # no or Attpunc # no
    or Socialskills # no or Socialdevel # no or Immature # no
    or Esteem # no or Disr # no or Aggr # no then
    reassert Att = "& ".
  endif.
endif.
if Workhabits # no then
  if Workhabits = medium then reassert Wh = "workhabits<m> ". endif.
  if Workhabits = high then reassert Wh = "workhabits<h> ". endif.
  if Workskills # no or Attpunc # no or Socialskills # no
    or Socialdevel # no or Immature # no
    or Esteem # no or Disr # no or Aggr # no then
    reassert Wht = "& ".
  endif.
endif.
if Workskills # no then
  if Workskills = medium then reassert Ws = "workskills<m> ". endif.
  if Workskills = high then reassert Ws = "workskills<h> ". endif.
  if Attpunc # no or Socialskills # no or Socialdevel # no
    or Immature # no or Esteem # no or Disr # no
    or Aggr # no then
    reassert Wst = "& ".
  endif.
endif.
if Attpunc # no then
  if Attpunc = medium then reassert Ap = "attpunc<m> ". endif.
  if Attpunc = high then reassert Ap = "attpunc<h> ". endif.
  if Socialskills # no or Socialdevel # no or Immature # no
    or Esteem # no or Disr # no or Aggr # no then
    reassert Apt = "& ".
  endif.
endif.
if Socialskills # no then
  if Socialskills = medium then reassert Ss = "socialskills<m> ". endif.
  if Socialskills = high then reassert Ss = "socialskills<h> ". endif.
  if Socialdevel # no or Immature # no or Esteem # no
    or Disr # no or Aggr # no then
    reassert Sst = "& ".
  endif.
endif.
if Socialdevel # no then
  if Socialdevel = medium then reassert Sd = "socialdevel<m> ". endif.
  if Socialdevel = high then reassert Sd = "socialdevel<h> ". endif.
  if Immature # no or Esteem # no or Disr # no or Aggr # no then
    reassert Sdt = "& ".
  endif.
endif.
if Esteem # no then
  if Esteem = medium then reassert Es = "esteem<m> ". endif.

```

```

if Esteem = high then reassert Es = "esteem<h> ". endif.
if Disr # no or Aggr # no then
    reassert Est = "& ".
endif.
endif.
if Immature # no then
    if Immature = medium then reassert Im = "immat<m> ". endif.
    if Immature = high then reassert Im = "immat<h> ". endif.
    if Esteem # no or Disr # no or Aggr # no then
        reassert lmt = "& ".
    endif.
endif.
endif.
if Disr # no then
    if Disr = medium then reassert Di = "disr<m> ". endif.
    if Disr = high then reassert Di = "disr<h> ". endif.
    if Aggr # no then
        reassert Dit = "& ".
    endif.
endif.
endif.
if Aggr # no then
    if Aggr = medium then reassert Ag = "aggr<m> ". endif.
    if Aggr = high then reassert Ag = "aggr<h> ". endif.
endif.

```

\PREPARE APPROACHES FOR WRITE AND RECOVER

```

if Management = yes
    then reassert Man = "management ".
    if Change Tasks # no or Affective # no
        then reassert Mant = "| ". endif.
endif.

if Change Tasks = yes
    then reassert Ct = "academic modification ".
    if Affective # no
        then reassert Ctt = "| ". endif.
endif.

if Affective = yes
    then reassert Af = "affective ".
endif.

```

\WRITE GOALS AND APPROACHES TO FILE AND RECOVER

```

goalfile = combine("goal",filenumber,".tmp").
message file = goalfile, combine ("Subgoals = ",At,Att,Wh,Wht,
Ws,Wst,Ap,Apt,Ss,Sst,Sd,Sdt,Im,lmt,Es,Est,Di,Dit,Ag,".").

message file = goalfile, combine ("Type = ",Man, Mant, Ct,
Ctt,Af,"."),"%".

read goalfile, Subgoals.

```

read goalfile, Type.
run File Clear.

\OBTAIN TRAINING OPTIONS

\RULES TO SET PUNISHMENT, EFFORT INTRUSION, GROUP PROCESS,
\INDEPENDENT WORK NEEDS PRIOR TO OBTAIN

\PUNITIVE RULE 1

```
if
  Prior Efforts = lots and
  Problem Severity = severe | extreme and
  Teaching Level # primary and
  Esteem Score le 1
then
  Punitive = yes.
else
  Punitive = no.
endif.
```

\PUNISHMENT RULE 2

```
if
  Problem Severity = extreme and
  Esteem Score le 1 and
  Punitive = no
then
  reassert Punitive = yes.
endif.
```

\PUNISHMENT RULE 3

```
if
  Get Help Followup = yes and
  Problem Severity # mild | moderate
  and Punitive = no
then
  reassert Punitive = yes.
endif.
```

\EFFORT INTRUSION RULE 1

```
if
  Prior Efforts = some or Problem Severity = moderate
then
  Effort Intrusion = moderate.
else
  Effort Intrusion = mild.
endif.
```

\EFFORT INTRUSION RULE 2

```
if
  Prior Efforts = lots or Problem Severity = severe | extreme
then
```

reassert Effort Intrusion = extensive.
endif.

\GROUP PROCESS RULE 1

if
 Problem Scope # one or Peer Influence = yes
then
 Group Process = yes.
else
 Group Process = no.
endif.

\INDEPENDENT WORK NEEDS RULE 1

if
 Subgoals = workhabits | workskills and
 Problem Situations = individual work | group work | away from class
then
 Independent Work Needs = yes.
else
 Independent Work Needs = no.
endif.

\CLASSROOM MANAGEMENT NEEDS RULE 1

if
 Disruption Aggression Score ge 2 and
 Problem Situations = teacher led instruction | individual work |
 group work | transitions
then
 Classroom Management Needs = yes.
else
 Classroom Management Needs = no.
endif.

\GENERAL SOCIAL GOALS RULE 1

if
 Subgoals = socialskills | socialdevel
then
 General Social Goals = yes.
else
 General Social Goals = no.
endif.

\WITHDRAWN SOCIAL NEEDS RULE 1

if
 Social Problems = never | sometimes | fear
then
 Withdrawn Social Needs = yes.
else
 Withdrawn Social Needs = no.
endif.

\MOTIVATION NEEDS RULE 1

Text Version of Batch Files

File Name: SNAP.BAT (This program displays the main SNAP menu.)

```
ECHO OFF
CLS
ECHO .....
ECHO *
ECHO *
ECHO *          WELCOME TO SNAP
ECHO *
ECHO * Type a and press ENTER if you would like to work on problems
ECHO * involving student learning in reading/language arts,
ECHO * math or in general.
ECHO *
ECHO * Type b and press ENTER if you would like to work on problems
ECHO * involving the behavior of individual students or groups
ECHO * of students.
ECHO *
ECHO * Type x and press ENTER if you are not interested in starting
ECHO * any of the SNAP programs.
ECHO *
ECHO *
ECHO * .....
ECHO *
```

File Name: A.BAT (If the user selects 'a', this program starts the Learning Strategy Selector. Upon completion of the Learning Strategy Selector, this program calls the SNAP.BAT program and the original SNAP menu reappears.)

```
ECHO OFF
ECHO *
ECHO *          PLEASE WAIT WHILE THE PROGRAM LOADS.
ECHO *
ECHO *
HTR LRNSEL
SNAP
```

File Name: B.BAT (If the user selects 'b', this program starts the Behavior Strategy Selector. Upon completion of the Behavior Strategy Selector, this program calls the SNAP.BAT program and the original SNAP menu reappears.)

```
ECHO OFF
ECHO *
ECHO *          PLEASE WAIT WHILE THE PROGRAM LOADS.
ECHO *
ECHO *
HTR BEHSEL
SNAP
```


File Name: X.BAT (If the user selects 'x', this program clears the screen and returns to the root directory.)

ECHO OFF

CLS

ECHO *

ECHO * This will place you in the MS-DOS environment.

ECHO *

CD\

File Name: FC.BAT (This is a one-line program used by the Behavior Strategy Selector to clear a file.)

DEL GOAL*.tmp